

Official Journal of the National Brotherhood Electrical Workers of America.

Vol. 6. No. 5.

ST. LOUIS, MAY, 1897.

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\$1.00 PER YEAR, IN ADVANCE.

TESTING THE COILS OF A STREET RAILWAY MOTOR WITHOUT THE USE OF INSTRUMENTS.

By Frank B. Porter.

Where instruments with which to test the resistance of the field coils of a street railway motor are not available, the following simple method will enable the person applying them to determine whether a coil is short-circuited in some of its layers, or is of too high resistance. In practice the results obtained by using these methods, while not equaling those obtained by the use of the voltmeter and ammeter, will be found superior to those derived from the use of a bridge, as higher voltage and more current can be used than are practical in the bridge as ordinarily designed, making the condition of the field being tested in regard to differences of potential and current passing equal to actual service.

An amount of current can be sent through the field equal to the maximum amount passing at any time when the motor is in service, and as an increase in

north and south, and the direction of its lines of force when excited will be east and west, i. e., place it so that, when excited, its north and south pole will be directly in the east or west of the compass N. S. (N. and S. being its north and south poles, respectively), whose needle should be parallel to the plane of the coil. Connect the coil in series with a resistance, or multiple lamp test. Closing the circuit by means of a switch,

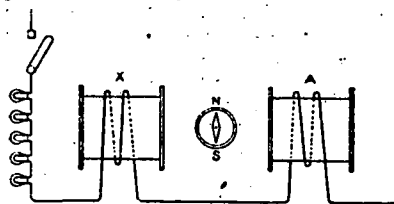


FIG. 1.

note which pole of the compass needle is attracted toward the field coil. Now, placing a similar, but standard, field coil (See Fig. 2) on the opposite of the compass, with its center directly opposite the centre of X, and equally distant with X from the center of the compass, send a current through it in such a direction as to cause it to attract the same pole of the compass needle as did X in the first place. By connecting both field coils in series so that the current will pass through them in the same direction, it is obvious that each is attracting the same pole of the compass needle, and as the needle is at an equal distance from each, it is also obvious that if the attractive force of each be equal, the compass needle will not be deflected. If, however, one field coil be stronger than the other, it will attract the pole of the needle in its direction. Should this be the case, move the compass away from this field, and toward the weaker, until a neutral point is found. As the magnetic strength of the coils is proportional to the square of the distance between them and the compass, if one coil, when the neutral point is found, is twice as far from the compass as the other, this coil will be four times as strong as the other, and the nearest coil would undoubtedly be short-circuited in some of its layers.

Next, connect the coils in parallel (Fig. 3) or multiple, but opposing each other as

before, and if the neutral point is found nearer than the other, the nearer one has a higher resistance than the other, caused by a faulty connection or broken wire. In connecting the coils in multiple care must be taken to make good connections between the test wires and the field terminals, or the result cannot be depended upon. In the first case, when they are in series, a poor connection will not so materially affect the result.

As the magnetic strength of the coil is proportional to the product of the number of its turns multiplied by the current passing through it, when the coils are connected in series (Fig. 3) the current is the same in each, and consequently if one is stronger than the other there must be more active turns in it than in the other, i. e., some of the turns in the weaker coils must be short-circuited.

A high resistance connection in either coil would reduce the amount of current passing through the coils equally, and thus reduce the magnetic strength of each equally, and so would not be shown, the compass needle remaining undeviated. When the coils are connected in parallel, however, a connection of high resistance in one of them will reduce the current passing in that coil and

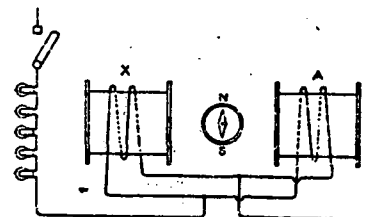


FIG. 2.

increase it in the other, weakening the magnetic force of the one and increasing that of the other, as will be shown by the compass needle.

If, on the other hand, with the coils connected in parallel, a portion of the winding of one coil is short-circuited, the resistance of this coil will be lower, and more current will pass through it than through the other, so that the product of the current and the number of turns might remain the same, and their magnetic force equal. This, of course, would

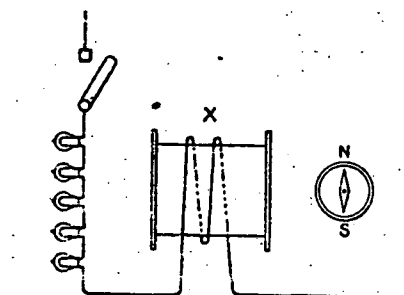


FIG. 1.

current increases the difference in potential between layers of the field coil winding, any charred or faulty insulation will be more apt to break down under the stress and a short-circuit result, while with feeble currents of low voltage, such as are generally employed in bridge work, very inferior insulation is effective in confining the current to the convolutions of the wire.

Take the field coil to be tested, X (Fig. 1), and place it so that its plane extends

not be shown by the compass needle. To make sure of a coil it must be tested both in series and in parallel with another. The distance that the coils should be placed apart in order to give the best results will vary with the size and shape of the coils. Short coils of large area should be placed close together. Longer coils, of less area, may be placed further apart. A few trials will establish the distance which gives the best results for any particular form of coil. The compass with the field coils, as will be perceived, is a form of the differential galvanometer, and as the coils are at hand in the repair shop, all that is needed is a pocket compass. By designing a switch with which to make changes in the connections in testing, a graded scale with a compass to slide on ways back and forth, and a rack to hold the field coils in their proper position, a very practical and useful instrument would result.

The second method of testing field coils, derived from the first, is still more practical. It does not necessitate removing the coil to be tested from the motor, as does the first method, and for certain classes of motors gives excellent results. If it is thought that a field coil, in a motor on a car, is defective, cut out the good motor, leaving the car to run on the motor which has the defective coil. If this motor has two field coils, say a top and bottom coil, disconnect the top coil and connect the bottom coil, so that the current will pass through it in the reverse direction. Go to the controller and turn on the current, when the motor should move in the opposite direction from that for which its reverse lever is set.

The reverse lever being set to go ahead, connect the top field in series with the bottom, but in opposition to it; that is, as it was at first, so as to move the car in the direction for which the lever is set. Turn on the current again, and if the car should move in one direction or the other, one field is weaker than the other. If the car should move in the opposite direction from that for which the reverse lever is set, the top field is the weaker; if in the direction for which the reverse lever is set, the bottom field is the weaker, and the weaker field will be found to be short-circuited in its windings. If the fields are about evenly balanced the armature will slowly turn until it takes up the play in the gearing, unless this be very new and close meshed, when there should be little play.

If the armature turns violently and with considerable force, taking up the play in the gears with a clash, there is considerable difference in the strength of the fields, although it may not be enough to cause a movement of the car. If in the above test the fields seem to be in good order, connect them in multiple and in opposition so that the weaker field will seem to have too high resistance. Care must be taken not to keep on the current too long when the fields of the motor are connected in opposition, or to cut out too much of the starting resistance. On the other hand, considerable current is necessary if one field is to cause the car to move, in opposition to the other.

A few trials will establish a safe notch of the controller as a maximum limit of starting resistance to be cut out. Care must also be taken to see that the brushes are in their proper position, if they are not so fixed immovably in the design of the motor. With much lead given them and the field coils evenly bal-

anced, the armature will try to turn in one direction, no matter which way the reverse lever is thrown. In practice, using these last methods, the writer has known motors, in which the field seemed all right to external appearance, to start the car off at quite a lively pace. By taking off the armature pinion and using a system of levers connected to the end of the armature shaft, force might be applied, and measured accurately by an ordinary platform scale, such as is found about any shop. The above methods were used for nearly a year, part of this time conjointly with a bridge, by a street railway repair foreman at a station where over one hundred motor cars were kept in repair, and it is his experience that these methods, where the tests are made with care, are more reliable than the tests of the resistance of a field coil by means of a bridge.

ALTERNATING CURRENT DYNAMOS IN PARALLEL.

By J. E. Woodbridge.

The advantages to be gained by the parallel running or alternating current dynamos are just beginning to be realized by electrical central station managers. The complications caused by the present prevailing system of running each machine on a separate circuit become very serious and annoying in the case of large stations where there are a large number of generators. The number of circuits increases necessarily with the number of machines, and the problem of properly distributing the loads on those circuits so that in the evening each generator shall do its full share of the work, and yet not be overloaded by some unanticipated addition, is a serious one. A compromise which results in poor economy always has to be made with loads which are subject to sudden changes that cannot be foreseen in the central station, such as theatre and church loads, etc.

Then constant attendance is necessary, as the load rises and falls through its daily range, to start up the fresh dynamos as they are needed, and switch on to them the different lines; and again, when the load falls off, to properly bunch the lines on certain dynamos, so as to keep the machines which are running always as near to their most efficient loads as possible. No little ingenuity is needed when the dynamos in the house are of various sizes and capacities. When the conditions are further complicated by the necessity of giving the longer feeders a higher voltage than the shorter ones, the increase in that voltage being proportioned roughly to the load, the switch-board man has no easy job. Added to that is the necessity of carrying over his circuits as nearly instantaneously as possible, to prevent too long a "wink" in the lights; and the risk of accidentally throwing two machines in multiple by a mistake in the manipulation of his switches.

The case is worse than the handling of a similar number of dynamos in parallel, as they are arranged, for example, in Edison stations; because in the latter case, all the circuits being multiplied, the various fluctuations of the different individual loads tend to even themselves up, and, being small in comparison with the whole multiplied load,

give far less trouble. There is also, but one load to watch, which, if the machines are well designed, automatically distributes itself evenly among them, while on the independent system there are a half dozen or a dozen different loads, each of which must be looked out for.

The winking of lights in switching is another disadvantage of the independent method of running alternators. To the critical customer, engaged in reading his evening paper, the sudden darkness of two or three seconds' duration and the jumping of the lights, as the grouping of the switches is changed, are great nuisances, and are likely to cause some remarks concerning the comparative steadiness of the Weisbach gas burner.

These disadvantages are eliminated by running all the alternators in a station in multiple on one set of bus-bars, from which all the feeders are tapped off, either direct or, in the case of long feeders, through adjustable boosting converters. With such a system the number of feeders can in most cases be considerably reduced, which means increased economy, as, for example, two No. 0000 lines cost less and give less trouble than the same amount of copper in eight No. 3 lines. Less copper, even, may be used by cross connecting the feeders, so that they may help each other out when unequally loaded.

Only a few years ago it was considered impossible to run alternators in multiple arc, or, if possible, not commercially practicable. In the year 1889 the new classical experiments of Mr. Mordey proved the contrary. In these experiments he coupled together two large alternators without resistance or impedance coils:

- (1) When running at the same speeds and voltage, but regardless of phase.
- (2) When running at the same speeds, but generating 1,000 and 2,000 volts respectively.
- (3) Generating 1,000 and 2,000 volts as before, but switched simultaneously together and on to a heavy load.
- (4) Running at somewhat different speeds.

In all cases they instantly pulled each other into synchronous speeds, and into proper voltage and phase relations and ran together on all loads; proving absolutely the ability of at least one type of alternating dynamo (the Mordey-Brush) to run multiplied under more trying conditions than do direct current machines.

Since then the multiple method of running alternators has been generally adopted in Europe, machines of different makes and sizes being run together in some stations, and in one place (Deptford Station, London), high voltage machines being multiplied with the secondaries of step-up transformers, the primaries of which are run from low voltage machines.

In this country the parallel working of alternate current machines has not as yet become prevalent. Large modern installations, such as that at Niagara, are arranged for parallel working; but the large majority of small stations work their machines entirely independently, constituting, to their own serious detriment, what Prof. Fleming calls "a collection of little central stations, arranged for the sake of convenience under one roof."

The engineers of such plants have the idea that alternating dynamos must be specially made for multiple working. The best ready test of the ability of any two machines to work together is to run one of them as a synchronous motor from the other. If it holds up to speed under a complete range of loads without excessive current passing (and most good machines of the same frequency will do so) the two will run together as dynamos if properly driven. This condition as to the mode of driving is more exacting than with direct current machines; as two alternators, when switched together, must keep the same speed with as great a mathematical accuracy as though their armatures were keyed to the same shaft. Working with this premise and the nature of particular types of driving machinery, the writer has derived the treatment described below, which seems to work well in practice.

Three cases present themselves in common American usage, viz., multiplying two machines:

(1) Where both are driven by the same engine or countershaft.

(2) Driven by separate engines, there being no other loads on either of those engines.

(3) Driven by separate engines, one or both of which supplies power to other loads.

In the last case no attempt had better be made to multiply the alternators, unless they constitute almost the entire engine loads, or unless the other loads on the two engines are also multiplied, as, for example, two 500-volt generators running in parallel. The treatment becomes then the same as under case (2).

In the first case, that is where the two generators are driven from the same source of power by separate belts, the essential features for a proper division of the load are, first, such a diameter of the best pulleys as to give both dynamos the same frequency when running light; and, second, such an arrangement that the slip of one belt shall be the same as that of the other at any load. If the condition does not comply with these requirements, the dynamo, the belt of which slips the more, will shirk its work as the load rises, making the other machine do more than its just share. In direct current working, differences in belt slip are very simply remedied by increasing the field excitation of the machine with the greater slip, thus making it take up its share of the load; but with the alternator this does no good, but makes things worse, if anything. If the two machines synchronize exactly when light, and one belt slips as much on fifty kilowatts as the other does on 100 kilowatts, the first machine will take only one-half as much load as the second, when in parallel, no matter what tinkering is done with the fields, the armature circuits, or the load. If the fields of the shirking machine are strengthened, the machines are thrown out of phase with each other, though not out of synchronism. This generates idle currents in series through the two machines, which heat up the armatures and reduce their capacity for carrying external loads.

This running out of phase by means of idle currents makes the indications of the machine ammeters very deceiving, as under certain conditions the ma-

chine showing the greater current may be doing the lesser work, and a machine may be even motoring, that is, taking power from the other machine by wire and returning it via the belts, without showing it on the ammeter. For this reason an indicating (not a recording) wattmeter should be used on each machine in addition to the machine ammeter.

This description of the effect of the slip shows that a turn or two of the belt tighteners should have a much more beneficial effect in adjusting the relative loads between the machines than any amount of manipulation of the field rheostats; and shows also why a clean belt should be run with more slack than an oily one, etc., in multiple work. The same theory probably explains also why more success has been attained in Europe than here in such work, owing to the use there of rope driving; since rope drives with automatic tighteners are more like each other in their slippage than are belts, which vary with age, quality of leather, amount of oil, water, dressing, etc. By the same reasoning leather link belts should run better in such service than solid belting, because the comparative tension of two link belts can be more readily estimated by the eye than can that of two solid belts. Whether this is or is not the case is unknown to the writer.

All that has been said about belts must be understood to apply only where the machines are driven from the same source of mechanical power. In the second case specified above, where separate prime movers drive the two generators, the treatment is quite different. Here the governors of the driving engines play a vitally important part. Not only must the engines drive the dynamos at the same frequency with great precision when light, but the drop in frequency must be the same in both dynamos at any load, that is, the drop due to the governing of one engine, plus the slip of its belt, must equal at any

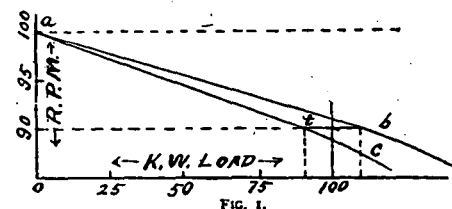


FIG. 1.

load the drop and slip of the other at the same load. If this is the case where the machines are independently run, they will divide the loads equally when run in parallel, whether of the same or different make, style and type. If this is not the case, the loads will not be equally divided, no matter what is done with the field rheostats or any other part of the electrical circuits.

It is true that the relative currents of the two machines may be varied by changing the field excitation; but the division of the load, as shown by indicating wattmeters, is not materially changed thereby, until the field excitations are unbalanced sufficiently to break the synchronism. This is owing to the fact that the relative loads depend solely on the relative cut-offs of the two units when running at the same speed.

In running two units of different sizes together, their governors should be so

arranged as to slow them both down the same percentage at any proportional part of their respective rated loads. For example, in arranging a 100-kilowatt and a 500-kilowatt generator for parallel running, the governing drop in the first should be the same with a load of 25-kilowatt as in the second with 125-kilowatt, also as much in the first with 50-kilowatt as in the second with 250, and so on. Under this condition, and only under this condition, will the two units in multiple divide their loads properly. If the smaller unit is belt connected and the larger direct connected, the slip of the belt must be added to the governing drop of the former before the comparison is made.

Strange as it may seem, the more poorly the governors work, in the sense of slowing down as the load increases, the more uniform becomes the distribution of the loads. This may be realized by plotting together the speed regulation curves of two engines, assuming a

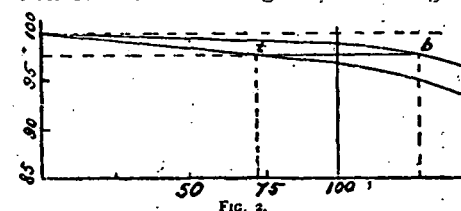


FIG. 2.

small unavoidable difference in speed. Fig. 1 is such a diagram for a pair of direct connected alternating steam dynamos of the same size. It may be seen that they run at the same speed (100 revs.) when light, but regulate poorly and somewhat differently, a b being the curve of one machine and a c that of the other. When the machines are independently loaded with 100 kilowatts each, the curves show that the first loses about 9 per cent of its speed, and the second about 11 per cent.

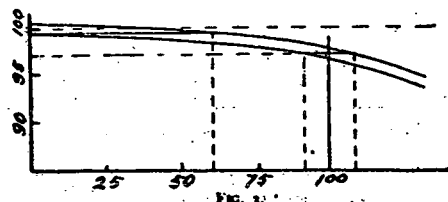
Fig. 2 assumes the use of two governors with the same equality at zero load and the same difference at high loads, but shows better regulation for both governors; the drop of one with 100 kilowatts being 1 per cent and that of the other 3 per cent.

Let us assume that the two machines represented in Fig. 1 are multiplied with each other, also the pair in Fig. 2 with each other. Assume a load of 200 kilowatts to be applied to each pair of units. In the case of Fig. 1 it is apparent that the two machines run at the same speed (about 90 revs.) when carrying respectively about 90 and 110 kilowatts, the intersections (t and b) of the horizontal 90-rev. line being, respectively, at those loads. As the speeds of the machines must be exactly the same when in multiple, and as the kilowatt power exerted by either unit depends solely on the position of its governor, the 200 kilowatts will be divided between the generators in that proportion.

The action of a governor, as far as the relation of the point of cut-off to the speed is concerned, is of course the same, whether its dynamo is independent or multiplied. In the case of Fig. 2 with better regulation, the diagram shows that the two engines run synchronously when delivering, respectively, about 70 and 130 kilowatts. This gives obviously a poorer distribution because of the better regulation. A little inspection of the figures will show that

the multiplying of one of the machines represented in Fig. 1, with either of those represented in Fig. 2, would give a much worse load division, the latter machine doing almost all the work at any load.

In Fig. 3 is shown the case of two governors that do not quite run together at any load, the regulation curves being similar but differing from each other for all loads by about 1 per cent. While the work will be divided fairly well at high loads, as is shown by a speed of 97 revolutions for 92 and 108 kilowatts, respectively, one engine will cut-off at the very beginning of the stroke, while the other is carrying 60 kilowatts. The first engine then acts as a brake and its dynamo as a motor. If the internal losses of the engine and dynamo are 12 kilowatts, the slower will absorb this amount from the faster, and the output from the pair will be 48 kilowatts. With atmospheric exhaust and some valve mechanisms the engine cylinder becomes an air-pump as the cut-off approaches zero of the stroke, absorbing a large amount of power. This explains



why, as has been found, some machines run well together when loaded, but get into trouble when light.

The phenomena illustrated in these figures are modified somewhat when belt driven units are used instead of direct connected units. The modification is caused by the slip of the belts, which, being approximately proportional to the load, virtually increases the downward inclination of the regulation curves, since these curves are intended to express the speed regulation at the dynamo shaft. In accordance with the theory given above, belt driven alternators should therefore multiple better than direct driven, other things remaining the same.

ELECTRIC RAILWAY SERVICE IN WESTERN CHICAGO SUBURBS.

The Suburban Railroad Company, which leased the Harlem branch of the Chicago and Northern Pacific last fall, is urging forward the work of changing the line into an overhead trolley line. This road is operated by Naugle, Holcomb & Co., the construction company which is installing the electrical equipment, and this company will operate the line for two years. The overhead trolley wire is all strung, and 24 of the new cars to be used are built and ready for the rails. In a short time the power house, which stands at the corner of Harlem avenue and West Twenty-second street, in Cicero, will be finished, with all its machinery installed, and the electric suburban service will be put in operation about June 1. The Suburban Railroad Company will lease a dozen light passenger cars from the Chicago and Northern Pacific and use them as part of the equipment of the road. The company is building branch lines to Berwyn, Riverside and La Grange, and has in contemplation lines

to other towns. The Harlem branch formerly was the old Chicago, Harlem and Batavia dummy line. At Fortieth street and Colorado avenue the Metropolitan Elevated road crosses the new electric line, and the trains of the Suburban company will climb up to the "L" grade on an inclined plane. As the motor cars will be fitted for both the overhead trolley and third-rail systems, they will be able to come over the Metropolitan tracks to the Union Loop. It is probable that passengers from all points west of the elevated terminal will pay 7 cents for the ride through to the business center.

A LARGE TELEGRAPH SYSTEM.

Superintendent Charles Selden of the B. & O. Telegraph said the other day that the average number of messages handled every day on the B. & O. system was 53,000, exclusive of train orders. The B. & O. has 22,252 miles of telegraph wire, of which they use 7,240 for company's business and the balance is leased to the Western Union. There are 384 telegraph offices on the line, of which 234 are reporting Western Union offices. Mr. Selden employs in his department 750 men, exclusive of linemen. He also has charge of the block signal offices, which east of the Ohio River average one to every six miles. The service of the company's plant is considerably augmented by the use of several multiplex systems.

ANACONDA BOYS ALL RIGHT.

Editor Electrical Worker.

As I have been roasted in the last three issues of the Electrical Worker, I take this opportunity of vindicating myself and hope these few lines will be published. Your honored Press Secretary of No. 65 has on several occasions said he wished I would fall in line and join No. 65. I would like to state for his benefit and other locals, that I was one of the charter members of No. 57 and was one of its most earnest workers until the panic came, and I, like several others, was compelled to "hit the road," in electric parlance, and came north and talked Union until I was tired, and then came here. Mr. Sullivan received a letter from Mr. J. T. Kelly asking him to try and start a Union. We are very much in favor of a Union in this city, but there are not men enough at work in the city to hold a charter. Therefore, we will all join No. 65, and in fact all the men in our employ here with very few exceptions have not joined because they don't want to, but because they cannot get a lay-off; but I hope before next issue of your valuable paper that all, including myself, will have become good 16 c. p. lamps, with no short circuits in them. My only reason for not joining before, was this: I have been a member of old No. 57 and learning a short time ago that the Union was broken up and a new charter issued, I take it that I could only join as a new member, or would I have to pay back dues and to whom would I have to pay—the Grand Lodge or Local No. 57—and then get a transfer to Local No. 65? Advise me at your earliest convenience.

Now, I would like to say something for the benefit of all members of Local No. 65. It has come to my ears that a certain member of that Local has broken one of the by-laws, namely Art. V. Sec.

4. It would be well for our honorable Press Secretary of No. 65 to look into this matter as soon as possible. A card addressed to me will find a very willing reply.

Hoping to see my name in print and good wishes for the future welfare of the N. B. E. W., I remain respectfully yours,
E. M. DE MERS.

Anaconda, Mont., care Light Co.

ORGANIZATION, HIGH DUES AND SUCCESS.

During the industrial crisis and stagnation with which we were visited since 1893 large numbers of workingmen lost their employment and many of them fell by the wayside, dropped their membership in the unions of their trade. This is not surprising in such cases, particularly where the unions, by reason of the short sightedness of their membership, failed during periods of comparative activity in trade to provide the means in the unions by which the members might, even to a degree, be sustained during dull seasons.

But there were other workmen who remained in employment and who, too, allowed themselves to become in arrears in their unions, and finally lost their membership. This, in most instances, was the result of the most benighted ignorance, resting upon the belief that the few paltry cents which would otherwise have been contributed in the shape of dues to the cause, were saved to the worker or the workers' families.

The events which have followed this loss of membership is sure to have its influence in perhaps shaping the course of workers in the future. There is scarcely an industry in any locality where the workingmen have allowed their unions to go to the wall where they have not been visited with reductions of wages so frequent and far reaching as to have almost staggered them, and now bringing them to a realization of their own folly.

We have frequently undertaken an investigation among the officers of the various Unions, from whom we have obtained authentic statements showing that in no centers where the workingmen have maintained their organizations have they suffered reductions in wages, and wherever the organizations have been maintained, more thorough and complete in themselves, not only have reductions been absolutely prevented, but in many instances have there been improvements in the shape of wages and other concessions to the workers, the existence of the crisis to the contrary notwithstanding.

It is a peculiar mode of reasoning that some workers will persist in, that is if it may be termed reason, when they imagine that there is a saving of money to them by ceasing their membership in the organizations of labor. While it is true that the expenditure made in the payment of dues is direct, yet reductions prevented and other obnoxious conditions warded off have outweighed and overbalanced the payments in dues a thousandfold.

As we are emerging from this industrial stagnation the workers who have retained their membership in the unions are now on the alert and preparing to take advantage of the opportunities presented for the purpose of becoming larger sharers in the product of their labor; in other words, are preparing to

secure a better return as a reward for their labor, while on the other hand, those workmen who severed their connection with their unions not only suffered the reductions, but are losing valuable time in reorganizing, which obviously would not have been necessary.

A union dissolved breeds a lack of confidence among the former members in themselves and in each other, and impresses many of them with a belief of their own impotency to either defend themselves or to make any practical progress. Within the past few months a revival of spirit among the workers of the country is manifest; a desire is awakened for organization. The workers are realizing that without organization there is no hope for them either to maintain their present economic and social position, their manhood or their independence. More than likely the growth of organization in the near future will far outstretch any previous period. It is a most interesting spectacle to see the large number of inquiries made, the yearning appeals that are expressed, for organization and for unity of action among the workers in order to secure more advantageous conditions of labor.

From all reports of officers and organizers and sympathizers of our movement it is evident that we shall soon witness a more complete organization of the wage workers of the country than we have ever had in any previous history.

With this revival of feeling among the workers of America the hope is sincerely entertained that the experience of the past will prove an interesting and beneficial lesson. Organizations of labor are not built simply to be crafts upon the ocean of the industrial struggle that they may be wafted along by fair promises and carried along upon the crest of trade activity. Our crafts must be thorough sea-going, and be enabled to withstand the winter's blasts and the equinoctial storms incident to our false economic conditions. They must be prepared to weather all kinds of seas on the bosom of industrial life, and to contend for their position in defense of the laborer's right, and to plow through the waves of opposition to secure the toiler's advance, the worker's amelioration and the laborer's emancipation.

The past has proven that only such unions of labor which are founded upon the basis of high dues are capable of withstanding real and bitter opposition and antagonism, and be the staunch defenders and protectors of the workers. It may be true that unions based upon this practical principle and policy may not experience a marvelous, rapid growth, yet it may be more truly said that they do not experience the decline or the withering process, as do the unions which are built upon the "Cheap John," low-dues idea, which grow like mushrooms in the night, and die for lack of that sustenance so necessary to their existence.

A union to which workers, either through ignorance or other cause, refuse to pay a fairly high dues cannot be expected to exert a vast influence in securing concessions or making improvements, or, indeed, taking up in an effective way the battles of labor. The unions of labor have no magical, mystical regions from which large or rich treasures can be drawn; there is but one way in which the unions can create a large fund which shall stand them in stead at

any and all times to be a bulwark for their safety, their defense and their protection; that way is by the members contributing fairly high dues.

It is a noteworthy fact that those workers who fail to contribute fair dues to the unions are those to cry out loudest in their demands for financial support when the trials incident to the labor cause are forced upon them; who, when the funds are not forthcoming at their beck or call, are the first and loudest in their denunciation of the "inefficiency of the union."

The time has come when plain speaking is necessary. The time is at hand when the workers are about to reorganize. There are large numbers, too, who have never before been in the organizations. They, too, should be reminded that to avoid the errors of the past is an exhibition of the greatest wisdom. The most potent manner in which past errors can be rectified, the errors which have wrecked most organizations, is the fact that the workers have in too many instances failed to realize that the most tangible help is mutual help, and that mutual help can only come when each will contribute a fair share towards providing the means with which the interests of each and all may be furthered and protected.

We trust that the workers in their efforts to reorganize will not fail to appreciate the advice gained by years of observation, the result of many bitter experiences in the movement to secure to the laborer his just reward—his just rights.

It is a mistake often made by those who start organizations of labor when they defer until a future time the incalculation of the payment of a fair dues to the union. We have often been met by the statement that the union is small now, that they would have the dues high but that they prefer to wait until a larger membership is obtained and then to raise the dues. As a matter of fact when unions are organized upon the basis of low dues it is most difficult to secure an increase in them when their membership has become larger. On the other hand when the right start is made less difficulty is experienced in this direction. Workers in the union of labor having paid a comparatively high dues realize the advantages which have accrued therefrom, and more readily assent to the increase in their dues not only in the hope, but with the assurance, that the advantages will be more than commensurate.

When a right start is made it is easier to progress along that line, while again when unions are organizing upon the basis of low dues a large membership may be secured in a brief period, when, as a rule, they usually overestimate their own strength and underestimate that of their opponents, and are loath to give even a second's consideration to a proposition of increasing their contributions. When a contest is met, when it is too late to remedy the defect, the organization is incapable of making the battle that was expected; they lose confidence in it and respect for it and it becomes disrupted. And when the union is gone they have realized their error and are forced down, down, down, until often their hopes are destroyed and revival in organization frequently an impossibility. With the new impetus which the move-

ment is about to receive we again impress upon the minds of our workers and all friends who may come in contact with them that they should start right, organize completely and thoroughly, but, pray, avoid building upon quicksands; build upon the basis of high dues, the rock of adamant, and fluctuations in the rise and fall of unions will grow beautifully less, the movement will receive a new impetus of strength and grandeur, greater self-reliance and mutual interdependence will be felt and the day for labor's disenfranchisement will be nearer and brighter.—Sam'l Gompers in American Federationist.

SUSPENDED.

Union No. 1, of St. Louis, has suspended James Runkle for receiving \$6.00 on application of C. M. Happs at Keokuk, Ia., and appropriating money to his own use. It is said he spent the money on "booze."

"BOB."

He just came along one day
And struck the boss for a job;
He said he had climbed out St. Louis way;
His name? Why, it was Bob.

I can't say he was much on religion,
For he could cuss as linemen can;
But he were kind and gentle like,
And talked up square, like a man.

He was a tall and lanky fellow,
As spry as a cat on a pole;
Always did his share of the work,
A kind-hearted, willing soul.

"Where is he?" you ask; he's dead,
Got killed by an engine one day;
"How?" I'll tell you. You see
'Twas in '96, the 19th of May.

We were stringing a line to Chicago,
And working in Erie that day,
Alongside the Nickle Plate road—
We followed it up all the way.

All the gang were up in the wires,
Working as busy as bees,
When Bob, looking round for the boss,
A kid on the track he sees.

A bright little golden-haired youngster,
Some mother's sweet darling child,
Without fear of the danger approach-
ing—
An engine, a-tearing like wild.

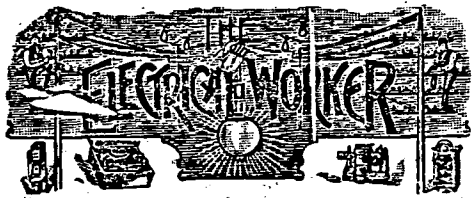
But Bob, he saw in an instant
The kid, and the engine's advance,
He let go and dropped—damn me, stranger—
He took a most horrible chance.

Well, he lit on his feet, and started
On a run for that golden-haired child,
Dashed over the track and grabbed it—
But he stumbled, and fell with a smile.

He threw the kid out of danger,
As the wheels passed over poor Bob!
They crushed out his life in an instant,
A good man was gone from his job.

A hero you say he were one,
That would do what lanky Bob did;
They are few and far between, stranger,
Who would give up their life for a
kid.

ETI.



OFFICIAL JOURNAL OF THE
NATIONAL BROTHERHOOD OF ELECTRICAL
WORKERS.
PUBLISHED MONTHLY.

J. T. KELLY, Publisher and Editor,
904 Olive Street, St. Louis, Mo.

ENTERED AT THE POSTOFFICE AT ST. LOUIS, MO., AS
SECOND-CLASS MATTER.

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AS THE ELECTRICAL WORKER reaches the men
who do the work and recommend or order the
material, its value as an advertising medium can
be readily appreciated.

St. Louis, Mo., May, 1897.

W. N. GATES, - SPECIAL ADVERTISING AGENT,
29 Euclid Avenue, CLEVELAND, OHIO.



Press Secretaries should remember
that letters to the "Worker" should reach
this office not later than the 25th of the
month to insure publication in the next
issue.

The Machinists and Musicians are in
convention in Kansas City this week. A
good combination for noise. Let us hope
their deliberations will be productive of
good to their respective organizations.

St. Louis, Detroit and Cleveland re-
port decided progress in the way of rec-
ognition this month. Let us hear from
other cities. The officers of No. 9 seem
to have all moved to Detroit. What is
No. 9's loss is No. 17's gain, but we hope
there is brain enough left in No. 9 to
navigate it safely in the absence of the
captain, mates, and a large part of the
crew.

We receive a number of complaints
from members who do not receive the
"Worker" regularly, but as a general
thing in making these complaints they
neglect to give their address. Our read-
ers should remember that if we have
their correct address, they will receive
the "Worker," and the fact that they do
not receive it is sufficient proof that our
mailing address is not correct.

Mrs. Isabella Cunningham, Holyoke,
Colc., is very anxious to hear from her
son, Charles L. Cunningham. He has
been in Philadelphia, Little Rock, St.
Louis and other cities, and been in the
Union in the three cities named. He was
in St. Louis last summer. Any one
knowing his whereabouts will confer a
favor on his mother by addressing her
at Holyoke, Colo.

The last issue of "Self-Help," pub-
lished by the International Correspond-
ence Schools, of Scranton, Pa., contains
a tabulated statement of over 15,000 stu-
dents who have taken courses in the
schools. Of these, 1,376 have taken one
of the courses in electricity, and include
men in all branches of the trade, from
the superintendent or general manager
of the plant, down to the dynamo ten-
der and lamp trimmer.

The Earls of Electra, a new mystic so-
ciety, which will take the place of King
Hotu (the Funny Fellows) will make its
first appearance in St. Louis October 1st.
As the name indicates, electricity will be
the main feature of the pageant of the
Earls of Electra, which it is said will
out-rival the famous Veiled Prophet pa-
rade, and should give considerable work
to electrical workers during the summer
months.

No. 18 should wake up. We are in-
formed that the Chicago Insulating Co.
is doing work for the Metropolitan Street
Railway Co. of Kansas City, paying the
munificent wages of \$1.25, \$1.50 and
\$1.75 for linemen, foremen and experts,
and that wages with the telephone com-
pany is on a par with this. When No.
18 had 139 members in good standing, as
it did in 1893, conditions were different
in Kansas City.

Mr. John T. McDonough, Commis-
sioner of the New York Bureau of Labor
Statistics, has issued a blank to be filled
out by labor organizations in the State
of New York, giving statistics in regards
to wages, hours of work, number of
members unemployed, etc. These sta-
tistics will be gathered quarterly, and
at the end of the year published in the
annual report of the Bureau. Unions
should be prompt in giving the desired
information, as sufficient attention has
not been paid to labor statistics by our
Unions. This effort of the Bureau to se-
cure reliable statistics is indorsed by
Daniel Harris, President of the New
York State branch of the A. F. of L.,
and W. J. O'Brien, President New York
State Workingmen's Assembly.

Only six months until our next bien-
niel convention meets. What lessons
have we learned during the past two
years of depression that we can profit
by, and use our experience at the next
convention in so amending our laws that
we will be better prepared for such
emergencies in the future? Would not
a financial system similar to that of the
cigarmakers be a good thing for the el-
ectrical workers to adopt? Can members
who worked steadily during the past two
years, while brothers were living on one
meal a day, expect this inequality to
continue? In other words, should we
not have an out-of-work benefit?

Our Press Secretaries can well afford
to dispense with a little local gossip dur-
ing the coming months, and discuss
economic policies which should be con-
sidered at our next convention.

THE UNION LABEL.

The great public which is in trade
unions knows much about union labels
and their effectiveness in strengthening
labor organizations and improving the
condition of the laborer. But the larger
public outside the trades unions, par-
ticularly the "up-town" public, knows
nothing about it, probably has never
heard of the union label.

It was to enlighten a portion of this
public that the Social Reform Club in-
vited John Graham Brooks to speak be-
fore its members last week. During the
past year Mr. Brooks has devoted con-
siderable time to the investigation of the
union label question, and spoke in part
as follows:

"The trade union is here as the trust
is here—with the change of methods of
production—and it is as justifiable as a
church or an oak or any other fact that
is. The trades union is necessary. It
will need to be stronger in the future
and all fair-minded people should stand
for it. The union label is a tag which
unionists put on goods to say to the
buyer, these goods were made under
unionist conditions. So far it has been
a weapon to fight with, a means to
strengthen the union rather than to im-
prove conditions. In so far as it stands
for better conditions the label represents
an elite mass of workers who have at-
tained an advantageous position.

"Unfortunately the label is not alto-
gether what it is represented to be.
When you read the trade union litera-
ture you feel that the label is something
worth dying for. If you insist upon hav-
ing it upon your cigar you may be sure
they are not made in tenement houses,
says the cigarmakers' union. The gar-
ment worker says no garment bearing
the label is ever made in a sweat-shop.
Unfortunately these statements are not
always true. But in so far as it is genu-
ine, and the label stands for what it
says it does, every fair minded consumer
should demand it and should support the
union issuing it."

In conclusion Mr. Brooks said he criti-
cised the label not because he was not
convinced that it was a bad thing, but
because he believed it a good thing and
that the trades union should be helped
to preserve it and to make the best of it.

John N. Bogert, secretary of the Great-
er New York Label League, defended the
label from the trades unionist point of
view. He thinks trades unions have
passed through a seige of trials, over-
coming many faults and evils in their
struggles from weakness to strength and
that the union label must pass through
the same ordeal. The label has been
made a power for improvement in three
trades, the cigarmakers, the hatters and
the printers, and has been adopted by
fourteen other unions. It has its defects
against which we must strive, but it
stands for a much wider interest than
that of the union which issues it. In the
case of the bakers it is a matter of gen-
eral public interest when it is a guaran-
tee of cleanly conditions, and when as in
the clothing trade and cigar trade it is
a guarantee against child labor and
prison manufacture.

M. E. J. KELLEY.

FROM OUR UNIONS.

ST. LOUIS NOTES.

In the March "Worker" mention was made of the Holland Building, for which M. S. Carter & Co. are general contractors. Also attention was called to one Alexander L. Ogilvie, a renegade member of No. 1. Work continued on the Holland Building, and Ogilvie had his way as foreman until April 22d, when a general strike was called. M. S. Carter & Co. refused to listen to a committee from the Union or to the Arbitration Committee of the Building Trades Council, and both parties settled down to a test of endurance. This was the first building trades strike of the season, and it was generally conceded that if this strike was won it would establish the supremacy of the Building Trades Council of St. Louis on all new buildings, for the conditions were as unfavorable to the Building Trades as they possibly could be on the Holland Building, from the fact that M. S. Carter & Co. are railroad contractors, and had their own iron workers and carpenters on the building, who are non-Union, and could not be reached by the Unions of their trades. At the end of five days Mr. Ennes, superintendent of the electrical department, sent for our delegate and stated that they would give up the fight and comply with our rules and regulations in the future. This was a great victory for No. 1, but of course we owe it to the Building Trades Council, which stood by us to a man. We do not anticipate any further difficulty in St. Louis this season, for with the Holland Building unionized, there cannot possibly anything come up that we will not be able to handle peacefully, particularly so with our agreement with the St. Louis contractors. We will tell at some future date about Alexander Ogilvie, the champion scab of the West. He might think it is English, you know, but this red-headed Englishman will be sorry that he ever left old "Hengland." We can congratulate the electrical workers of England in getting rid of him, but are sorry that it should be our misfortune that he should come to the United States. He should have gone to Turkey. It would be more congenial to his tastes and morals.

Some time ago the city of St. Louis advertised for bids for lighting the city for twenty years, from January 1st, 1900. On the day on which the bids were opened, not a single bid was received. This looked like a conspiracy on the part of the companies to try to get the city in a hole by delaying matters as much as possible, and when the city was at a disadvantage to dictate their own terms for lighting the city. The lighting companies were not as shrewd as they thought they were in this matter, for their action has caused a strong sentiment to develop in our city in favor of a municipal plant for to light the whole or part of the city. In addition to this, the new bids which have been advertised for, call for either gas or electric lights for our streets. St. Louis was the first large city to adopt an exclusive electric light service for its streets, and should it again go back to gas, our grasping electric monopolists alone are responsible. There has been more improvement made in gas lighting during the past ten years

than in electric lighting, and while the price of electric lighting is the same now that it was ten years ago, the price of gas has been reduced about one-half, while if we consider the improved gas burners of to-day, the price of gas is not one-fourth what it was ten years ago. When electric lights were first introduced and had to compete with gas, an effort was made by the companies to furnish first-class service at reasonable prices. But when they thought they had a cinch, they adopted the "public be damned" policy, so much so that if a man had a grudge against any one, the best way he can get even is to try to induce him to use electric lights. This would be vengeance indeed..

The Kinloch, the Bell, the Edison, and the Missouri companies are laying conduits at a rapid rate. We cannot state when electrical workers will get any benefit out of this. The wave of prosperity has not yet reached St. Louis, although there is quite an improvement in electrical business. This, of course, is no more than could be expected, as there is always considerable work done in St. Louis during the spring and summer months. Our reading room is now almost entirely deserted during the daytime, which is a good indication that work is picking up.

Bro. A. F. Carville received a double dose of prosperity—a bouncing boy, and a position as superintendent of a plant in Arkansas—all within a week. Arty has the congratulations and good wishes of every member of No. 1, as he has been a hard working, faithful member. The Grand Secretary has purchased a bike. If the readers of the "Worker" do not receive the paper on time next month, they will know that he is laid up for repairs.

"Horrible Death of a Lineman" is such a regular caption in the daily press that little attention is paid to it. The latest St. Louis victim is Edw. Clayland, who was killed on a pole at the corner of Fifth and Chestnut streets, on April 21st. Clayland came to this city last summer from Fort Smith, Ark., and joined Union No. 1. When work got scarce in the fall he left the city, but returned to St. Louis again about April 1st. and went to work for the Missouri Electric Light and Power Co. While away, either through neglect or inability to pay, he allowed himself to become suspended, and consequently was not entitled to death benefit. His body was shipped to his family at Fort Smith, Ark. At the Coroner's inquest the usual verdict of "death from accidental shock, caused by neglecting company's rules," was rendered. He neglected to wear rubber gloves, and had on a pair of buckskin gloves when he met his death. Much might be said on this subject, and what action the Unions should take. It is claimed by some that a man cannot work to advantage with rubber gloves on, and if he persists in wearing them, and thus be slow at his work, he will be fired by the foreman, while, on the other hand, if he does not wear them, and should meet with an accident, the company sets up the plea that he violated their rules..

ELECTRON.

UNION NO. 2, MILWAUKEE, WIS.

Our Union is in a flourishing condition. We are just getting over the effects of our strike, and most of the boys are finding work. We are working eight hours,

at 31 1-4 cents per hour, time and a half for over-time and double time for Sundays. It is a great deal better to work eight hours than ten, particularly when you receive the same pay for eight hours as for ten.

Keelyn and Smith, who were among most active members until they withdrew from the Union after going into business, and who have since been the best friends the Union has, have been obliged to find larger and more convenient quarters in order to take care of their constantly increasing business. They will, after May 1st, be located at 169 Water street, where they will not only have more space, but at the same time be more within the business district.

Bro. Fred Raymond was elected Press Secretary, to fill the vacancy caused by the resignation of Bro. Chas. Herman. You will hear from No. 2 regularly in the future, as Bro. Raymond is a charter member, and has been one of our most active workers, and never shirked a duty. H.

UNION NO. 7, SPRINGFIELD, MASS.

Another month has rolled by, and I am again called to duty. No. 7 is still on the go, and we have taken in six members since my last letter. The electrical workers here are just beginning to realize the benefit of our organization. It takes a long time to wake up some people, or to have them understand where they are going to derive any benefit. One thing that is helping us along wonderfully is that all members are attending meetings regularly, and I think if all members of the Brotherhood would attend meetings more regularly than they do, they would learn more to their own interest than they would by staying away and setting a bad example for others. If every member would attend meetings regularly there would not be so many Unions going to pieces. Now if all brothers at a meeting would kindly say a few words in praise of their Union, it would help the good cause along. Also try and impress upon your fellow workers the good organized labor has done throughout the country.

Work in this vicinity has been rather dull all winter, but most of the brothers have been at work. At present outside work is good, but inside wiring is almost at a standstill, with no prospect of getting better.

The Western Union Telegraph Co. have put their wires under ground, and the Postal Co. are soon to follow. Also the Fire Alarm, as the fire at the Opera House on April 5th, in the rear of the station, cut off eighty-five boxes for that night, as all lines ran directly over the roof of the burning building.

M. FARRELL,
Press Secretary.

UNION NO. 17, DETROIT, MICH.

I have again been prevailed upon to accept the office of Press Secretary, and while my reputation as a literary writer is rated at "nix," I will endeavor to do the best I can. My predecessor, Bro. Beamer, has been appointed keeper of a light-ship, out in the middle of Lake Huron. I have no doubt he will find his new duties more congenial, for about the only work he will be required to perform will be to eat hard tack and commune with the fishes, and while he is not a man who is prone to relating fish

stories of a questionable character, he will find when he returns in the fall, that we are prepared for the worst. As a position from Uncle Sam, under the civil service, generally means during good behavior, which in Bro. Beamer's case means practically for life, it is a question whether he will ever again take part in our meetings, where he was always a prominent figure and forcible debator. Especially will he be missed at our smokers, where his melodious voice was ever at the disposal of the Union for the amusement of visitors. We wish him success in his new venture and I think I express the sentiment of the members when I say we could well have spared a better man.

In looking through the "Worker" last month, I could not help but admire the decided improvement in the general tone of the letters that appear each month. Especially was I interested in the one from No. 38, across the lake, inasmuch as Bro. Wheeler offers twenty-five of the best Union made cigars to the Press Secretary whose Union can show a greater increase in membership by April 22nd than No. 38. Now it seems to me he is not sincere in his offer—that he has a string to those cigars. In the first place, the contest closes April 22nd, just about the time we receive the "Worker," so we will have no time to contest for them. In the second place, the winner must come to Cleveland after them, which in itself would debar every secretary from competing. Now, if Bro. Wheeler is sincere, I will make him the following offer: I will bet him 25 good Union-made cigars that on June 1st No. 17 will show a greater increase in membership during the year than No. 38. Bro. Kelly to decide the contest, according to his records, and the loser to send the cigars to the winner at his own expense. Now, Bro. Wheeler, get those cigars ready.

I copy the following from one of the Detroit Sunday newspapers, which explains itself: "Geo. Harrison is a member of Electrical Workers' Union No. 17, and the other members wish there were more like him. It is said he is willing to lose a night's sleep at any time if he can make a convert to the Union, and as a result of his untiring efforts the Union roster has been swelled by the addition of twenty names. To show their appreciation of his efforts the members at their last meeting voted unanimously to present him with a handsome emblematic badge, which he will wear with considerable pride. This Union is fast getting to the front, and has now 29 applications on file." Bro. Wheeler, those cigars are mine.

Work is good here at the present time. The Detroit Telephone Company is busy building an exchange, and as a consequence the city is full of linemen; good, bad and indifferent. But as they were not receiving the required scale, they decided to demand a raise. We appointed a committee to formulate an agreement, and presented it to the company, and after a few conferences, it was accepted and signed by both parties. This practically makes this a strictly Union concern, so any lineman coming this way better look to his card, and see that it is paid up, or be prepared to cough up \$5 when he goes to work, for his initiation fee.

In reading the different letters in the "Worker" each month, I notice it is customary for the secretaries to pull some old switch at the close of their letters,

but as a kerosene lamp is the best I can afford, it will be impossible for me to follow the usual precedent this time, but instead I will pull this jug from the top shelf, brush the cobwebs from the cork, and drink to the health of all Union men and as the echo of the gurgle dies away in the distance, I will lay me down to pleasant dreams. JO BEDORE.

UNION NO. 22, OMAHA, NEB.

Another month still finds No. 22 on its pegs, although everything is quiet here. The contract for wiring the new post-office was let to W. I. Grey & Co., of Minneapolis, and I suppose that work on it will begin soon. There is to be about 800 lights, and the contract calls for brass armored conduit or its equivalent. That is the only wiring job of any extent here.

I understand that the T.-H. Light Co. intends to rebuild their station this summer and replace their old engines and dynamos with direct connected three-phase alternators and 125 light brush arc machines. Of course that will necessitate overhauling and rebuilding all of their lines.

Work has at last been started on the Trans-Mississippi Exposition grounds. They are building the fence around the grounds and have advertised for bids for removing about 80,000 yards of dirt for a lake. From the start they have made one would judge that the exposition will not help Omaha labor very much. The Executive Committee seems to think that there is not good enough material among Omaha's workmen to do the work, so they are importing every one they can, from architect to common laborer who uses a No. 2.

A member of the Architects' Exchange called on and addressed the Central Labor Union at their last meeting, and we are going to try to bring enough pressure to bear on the Directors and Executive Committee of the exposition to secure for Omaha labor the benefits which it ought to have. The C. L. U. appointed a committee of seven, of which yours truly is a member, to try and bring about the desired result.

It was with great pleasure that I read in the "Worker" that No. 55, of Des Moines, is again in the fold. I was a charter member of No. 55 when it was first organized, and we had a very good Union for some time, but the "green-eyed monster" got in his work with some of the members and you can readily see the result as a natural consequence. But as I said before, I am glad that they have seen the error of their ways, and concluded to come back to the parent hearth, and under the guidance of Bro. L. M. Steadman, they should get along fine, as there are a great many worse men who could have been made president. If any of the brothers who read this feel so disposed, I would be glad to hear from them.

MARK T. CASTER, Press Sec'y.

UNION NO. 30, CINCINNATI, O.

News is so scarce in our city that it is a hard matter for me to find material enough to write a decent letter for the Worker. To a brother who has been or worked in "Cincy" it is an easy matter for him to understand this remark, and more so especially if he has been in or out of here during the past three years. Cincinnati is a good-sized place,

and has plenty of electrical power floating in and around it, but for some reason the different companies here can get along with fewer men and carry more amperes than in any other city of its size in the United States. Possibly it is the management of affairs that accounts for it, or else it is because we are surrounded by hills which keep off the winds, for if the wind blew sufficiently hard here it would be a wise move to get in the cellar, for a double P. insulator might accidentally hit one on the head, or else he would be in danger of getting a shock.

Speaking of shocks. Well, Ohio now uses the "juice" instead of the rope, and from the best information everything worked A1 at Columbus in the double execution on the morning of April 21. I was speaking to a gentleman who viewed Wm. Haas' remains the day after, and he said with the exception of a small blister on the calf of the leg, and a small bit of singed hair on the nap of the neck, the corpse looked as though he died a natural death, so that the rope is a thing of the past in this State.

Work? Well no, there is no prospects of very much being done here this summer, and if a brother can catch on before reaching here, do so, for you have a very poor chance here. There are a score or more of men walking around pressing brick just now, and may be all the rest of this year if they stay here, but I am glad to say every member of No. 30 is working. In fact, just as soon as they join, they seem to be able to pull down a job shortly after, and several of them on the outside think if they were in it would help them to find a job, and we think so, too.

In the past month we have added four new names to our membership and several are on the right road, and we only hope they will keep their toes pointed our way until they reach us. We will keep on persuading everyone on the outside until they join, or else go and join the Turkish army, and if they do the latter they are apt to have their light put out before they know it.

No. 30 made application to the Building Trades Council last month, and it was acted on favorably, so that now we have two delegates in the Council and expect good results to follow as the different trades unions have always taken great interest in us, and are always willing to help us along in every way they can; so taking everything now, it looks as though our prospects for success were never brighter, and as a consequence, all the boys are happy.

Baseball? Well, there are some who are 22 carat fine on the subject. How do you stand?

T. B. SPELLISSY, Press Sec'y.

UNION NO. 36, SACRAMENTO, CAL.

Once again I will try and be represented in the "Worker." I hope I am not too late for the April edition.

I must say Sacramento is very quiet in our line of business, but we have good prospects in sight, and it can't come too soon, as there are quite a number of the boys loafing just now.

We have started to make arrangements for our first picnic, to be given by our Local, and we are going to do all in our power to make it the boss of the season. We have selected Sunday, June 6th, as the day, and East Park as the place.

There has been another accident to a Sacramento lineman, by the name of John Richards. He was in the employ of the Sacramento Electric, Gas and Railway Co., and was working on the trolley repair wagon, when, in some way, he was knocked from the top to the street, breaking one of his legs just across the instep, and from all reports will be laid up for many months to come.

R. A. FISK, Press Secretary.

UNION NO. 38, CLEVELAND, O.

I suppose a majority of the men who are unemployed in this country would be glad to work eight hours for eight hours' pay if they had the opportunity. It is likewise reasonable to suppose that a majority of the men who are employed would be glad to work eight hours per day if they were sure of receiving ten hours' pay for the eight hours' work. There are twenty million working people in the United States. Four million, or one-fifth, of this number are idle. Now, if the sixteen million who are working ten hours a day would only work eight hours, there would be a demand for more help, and in order to do the same amount of business that is now done with the sixteen million at ten hours per day would require the help of the extra four million who are unemployed, providing all worked only eight hours per day. Now, when all the working people in this broad land are employed, don't you think they will be able to fix the rate of wages which each is justly entitled to? I for one am inclined to believe they can. The eight hour movement has been started in this city by the Unions connected with the B. T. C., and they have made a success of it. Now, if this can be done here, why can't it be done everywhere? I believe it can, and when this is accomplished throughout the length and breadth of this country, a long step will have been taken towards solving the labor problem.

No. 38 is now in a prosperous condition. We have closed our charter, but are still receiving applications from men who want to work on buildings, but who will not be allowed to do so unless they have a working card. If the eight hour movement were pushed in other cities as it is in Cleveland, a non-Union lineman would be a curiosity.

By the way, what has been done about organizing some of those Eastern cities for which there was \$300 appropriated at the A. F. of L. convention last fall? We have heard nothing very definite from those as yet.

There is another subject I would like to see discussed in the "Worker," and a very important one it is, especially to those employed in the manufacturing business, and that is the organizing of girls who work at the electrical business. It is a well-known fact that a large part of the work done in the electric manufacturing establishments is done by girls. They take the place of men, do the work of men, and for less pay. Now, what are you going to do about it? That they should be organized there is no doubt, but how and in what form is it to be done? Shall we take them in with us or form them into a Union by themselves? I would like to hear from some of the Locals upon this point. Chicago, Detroit and Buffalo, what do you think about it? Wake up, and let us know where you are upon this point.

Some men were born for great things.

Some were born for small,

Some it is not recorded

Why they were born at all.

The above may be truly applied to some of our Locals, and unless we get a hump on us, no one will be able to state just why we were born. At present we are little more than a social organization, but we hope for a beneficial Union, which will in the near future be a benefit to all concerned. As soon as we begin to derive some genuine benefit from our Unions in a way that each and every man will feel, and feel that if he is to live a life worth living he must be a Union man; then will we become strong in ourselves; then will we be able to say to all who oppose us, "Thus far shalt thou come and no farther;" then, and not till then, can the workers of this country cease to eat the bread of idleness; then will they be able to sleep the sleep of peace and contentment.

THOS WHEELER, Press Sec'y.

UNION NO. 43, SYRACUSE, N. Y.

No. 43 meets first and third Thursdays at Greenwald's Hall, corner Mulberry and Water streets, at 8 p. m. By the above, brothers who contemplate visiting our city can tell when and where to meet any of the boys, as we have moved from our former rooms on account of space, for we are increasing so in membership that more room was needed to cut in the circuit for new victims.

Work is about the same here, and just at present we have more men than work, but judging from the way our worthy President was fanning his way down street, loaded with No. 4 knobs, it looks as though he had struck oil. We all hope so, and that business will boom.

We are all interested in the Union to such an extent that we are now with the Building Trades, and hope in the very near future to have as strong a Union as any in the list of Union towns.

The boys read of No. 1 and its contract with the contractors, and I think with some of the boys, that such an agreement would benefit us here, as it would settle a good many points that are now open, and which cause trouble.

We lost one of our best members, Bro. Larry Myers. He hasn't joined the "white winged," but concluded to change his boarding place. The last heard from him, he was in Rochester. If No. 44 gets him it will end, as we did, a brother from top to toe and one who knows his letters in our line. Luck to Bro. Larry.

The Railway Co. contemplate rebuilding all their lines as soon as they can finish with a few more boys, as it seems they are only killing boys. They don't believe in fenders. If any of the brothers think of striking here, take my advice and find out all about the work and firm and wages. Don't let them monkey with any N. B. men as they do with outsiders.

Bro. Van Patten and myself are out of work for a time until work walks in the door of the new owners of the Electric Specialty Co., but I think they will make a dismal failure, and all the boys who worked for the former owner, J. L. Hamilton, are sorry he sold out. Bro. Van smiles and shoulders his rod and line to urge the wary trout to take a bite with him, and I guess he will enjoy part of

the time of his lay off. I suppose he thinks I will too with my chickens.

Sorry to read of the brother in Texas who fell, and I guess we will read a few of his books in this city. We hope he may soon be on his feet, entirely recovered from the effects of his fall.

If any of the brothers in No. 1 know of a namesake of mine in St. Louis, and he isn't in the fold, just whisper to him to put his name down on an application blank. Get him in, and don't forget the circuit. BENJ. T. DELAFIELD,

Press Secretary.

UNION NO. 44, ROCHESTER, N. Y.

There is not a great deal of work going on now, although I think most of the boys are working.

Bro. Breeze took some of the boys down to Geneva to do some inside work. I would warn any of the brothers to steer clear of Rochester just now, as far as work is concerned, although the prospects are quite good for a busy season.

The Bell Telephone Co. is laying five or six miles of 100-wire cable in the ducts which were laid last fall.

Local No. 44 is slowly but surely trying to take the lead in membership, as we installed another new light last meeting night.

I deeply regret the duty of announcing the death of one of the most ardent workers of Local Union No. 44, Bro. Wm. McGinty, who died at his home in Avon, N. Y., April 5th, 1897. Bro. McGinty was a young man highly esteemed by all who knew him, and by his death Local Union No. 44 has lost one of her brightest lights. John McGinty, the father of our late brother, is one of the oldest wiremen in New York State, and is at present located at Avon, N. Y.; in charge of the Western Union lines. He has been in charge of the W. U. lines over twenty years. Joseph E. McGinty, now located in New York City, is an uncle of our late brother, and he has also served a long term in the wire business—I guess twenty years and over. The readers of the "Worker" will probably remember having heard his name connected with the Brotherhood. He was president of Local Union No. 36, of New York City, I believe.

Owing to the home of Bro. McGinty being a great distance from Rochester, Local Union No. 44 did not have its full membership at his funeral, as is customary with us in all such cases, but we were fairly well represented, with about thirty members. Bro. Hall, of No. 45, of Buffalo, also attended the funeral. Bro. McGinty was a member of Branch 45, C. M. B. A., who turned out about seventy-five strong. The floral offerings were numerous, among them being a beautiful harp from No. 44, a pillow from his fellow workers of the Bell Telephone Co., a large pillow from his parents, cress, harp and numerous other beautiful pieces from his schoolmates and young people of Avon; also one piece containing twenty-one lilies, representing his age.

F. GRAHAM,
Press Secretary.

Resolutions of condolence adopted by Local Union No. 44, Tuesday, April 4th, 1897:

Whereas, Almighty God, in His infinite wisdom, has called from our ranks our worthy brother, Wm. McGinty; therefore, be it

Resolved, That while we submit in humility to the wisdom of our Creator, that

in the death of our brother, his parents, brother and grandparents mourn the loss of a kind son, an affectionate brother, and a just and noble grandson, and his friends an upright and respected associate; and be it further

Resolved, That we, as members of Local Union No. 44, tender our heartfelt sympathy to his parents, brother, grandparents, and friends in their great sorrow, and commend them to Him who doeth all things well; and be it further

Resolved, That these resolutions be spread upon our records and a copy be presented to the family of our brother and the same be published in the official journal of our Order.

J. D. M'GUIRE,
J. L. GUERINOT,
J. KENNALLY,
U. DEVEROUX,
D. WILLIS,
Committee.

UNION NO. 45, BUFFALO, N. Y.

Most of the electrical companies of this city have now practically acknowledged that Union labor is the better labor in the end. Through the instrumentality of Local No. 45, they have agreed to hire none but Union men, the pay to be \$2.25 per day, each journeyman being allowed to have one helper. This will be quite beneficial to the contractors, as they will all be placed on the same basis, so far as labor is concerned. Formerly the contractor who could hire the cheapest labor could make the lowest bid for a contract. This will now be done away with, and the men will not suffer from the "slashing process."

Bro. John Roydes is on the injured list this month, having had his toes crushed while unloading poles.

The J. C. Stearns Company of this city have obtained the contract for doing the electrical work at the State Hospital, at North Collins.

J. LODGE, Press Sec'y.

UNION NO. 48, FORT WAYNE, IND.

The most pleasurable sensation after breaking out of jail is breaking into the papers, so here goes.

No. 48 is still alive, but our numbers are few. Bro. Kent of Chicago is in Paulding, O., and Bro. Decker of No. 48 is with him. Lathouse and Buskirk are the only ones working for the Home Company. Kraus and several of the boys are in Kendalville.

There is a strong Union feeling in the city at present.

If Bro. Dan Binkley will write me at 31 Douglas avenue, I would like to keep track of him.

Bro. Knox and the writer are in Wabash working for Mr. Bowman, late manager of the Home Telegraph Company in Fort Wayne. He has several thousand feet of cable to pull and other work, which will keep us busy for two or three weeks.

Must close this, my first offense, and if the fates permit will try again.

G. B. TAYLOR, Press Sec'y.

UNION NO. 52, DAVENPORT, IA.

We are not in much better circumstances than we were at the time of writing my last letter to the "Worker." Over two-thirds of our members are out of employment, and some of them are having a hard time to make both ends meet. In fact, I guess they don't meet at all; and now I would like to say a

word to all the brothers—not to our own Local Union alone, but to all Unions: There are a great many men out of employment, and they cannot get work to do. They have families to support. Times are very hard, and they cannot pay their dues; they get behind, and will not come to meetings because some seem to think that when a brother is three months in arrears he should not be allowed a seat or place in the meeting. Now, that is all wrong, and I claim that when a brother is in hard luck we should help him, and if he is in arrears carry him until work can be procured, and give him a chance to pay up, or else suspend his dues altogether until he goes to work, when dues can commence again. Once in a while I hear a brother complain that the dues are awful high, and inquire when are we going to make them less. Now, if there is a man working who cannot spare a paltry 60 cents a month to help struggling humanity, he must be very poor, or very small. Brothers! let's rather throw in an extra 10 or 15 cents a month to help a brother in need, and not kick about paying our just share of the legitimate expenses. If you notice, it is the men who can least afford to pay who are the most prompt to keep square, and never say a word about excessive dues, and the kickers are the ones who have the money to spare, and yet they are the ones who will claim benefits first. But it's the old saying: "The more a man has, the more he wants."

We had a little surprise at our last meeting; a pleasant one, by the by, for Bro. James Kane is with us again, and was at the room early to be sure of a seat. If one-half of our members were only like Bro. Kane, we would not have so many empty chairs on meeting nights, nor would the work always be left to a few, as is generally the case.

Bro. Kane is a man past the prime of life, yet he has more push and strength to take hold of Union work than three-quarters of the young men who are yet in their prime, or have not reached that stage. Old Jimmie Kane is always ready and willing to put his shoulder to the wheel and give it a push.

Bros. Marrou, Speer, Thurston and Riedel are talking of leaving town on a hunt. Not a duck hunt, but work. We have not heard what kind of guns or traps they were taking along, but if such a thing as work exists they will have to be very shrewd if they hope to be successful, for it is said work is fast becoming extinct, and we want to say right here that we are in favor of a law prohibiting work hunting for a term of one hundred years, which would give ample time for "it" to grow. (I guess it grows.) And for a penalty, I think about ten years in Davenport or Moline would be about right, and when such offenders are turned loose they would never hunt again. (Moline has, you know, the hospital for the insane.) We wish you success and God speed, boys, and hope you will find no worse places than you are leaving—if such exist. If you ever run across Bro. George H. Elliott, tell him to write us, for we are anxious about him.

J. H. CLARK,
Press Sec'y.

UNION NO. 55, DES MOINES, IA.

Local No. 55 sends a hearty greeting to sister Locals all over the country. Des Moines has concluded to once more join the Brotherhood of Electrical Workers

with a more firm determination than ever before. We called a meeting two weeks ago to organize a Local Union, and seventeen men responded, and I will say that I have never seen a body of men get together with more determination than we did. We concluded to organize, and the following officers were elected: Our popular brother, L. M. Steadman, President, and he makes a good one. Steadman is a jolly fellow and well liked by all the boys. Ed Purcell, Recording Secretary; W. P. Leedon, Financial Secretary; W. Herring, Vice-President, and your humble servant, Press Secretary, and as this is all new business to me, you will be lenient with me until I get all the circuits down pat.

There is a little work going on here at present. The Mutual Telephone Co. has some men at work. Bro. Herring has charge of the line work, and says he will put up the line in shape or bust.

Our Committee on By-Laws met and made our local by-laws, and I must say I have never seen better laws made for any Union than were read at our last meeting, and the brothers gave the committee a vote of thanks for their work.

I will send you more next time, as this is my first attempt. The boys have bought a rope and they say they will use it if they do not hear from their Press Secretary.

If Bro. Redman does not get a new pipe, he cannot get into our next meeting.

JAMES MARTIN,
Press Secretary.

UNION NO. 56, ERIE, PA.

No. 56 is coming to the front in grand order. They, I mean the people who waited to see if we were going to make a go of it, are now seeking us. We turned the current of light and juice on six at our last meeting, April 21, and two on April 14. We are now about thirty strong with six applications on hand, and several new proposals in sight.

I would like to say a few words for the boys. All are good steady workers, and fear naught. We are in first-class condition for a new Union, and every member seems to take a great interest. At roll call all officers are always present, and it speaks well for the Union to have a good set of officers. President Ed Gilmore is O. K. and Vice President Billy Crane is as full of parliamentary rules as any of them. Just the kind of timber we need in our business.

I believe Erie is the only place on earth where trimming is done on contract and a trimmer trims 80 to 95 lamps for so small a pittance as he gets here. I am of the opinion the electrical workers are not appreciated as they ought to be. Who but the man who risks his life every day makes it possible for the spoiled darling of society to see the stumbling blocks on Erie's "brick-bat" sidewalks, as she hides herself home from the pleasures of the social world, and how could she chew gum and talk sweet nothings to "Chawley" over the phone if it were not for the brave boys called linemen and telephone inspectors.

I often wonder if it does not poison some people to walk on the same sidewalk with a workingman, but things are going to change some day and we poor grubbers and toilers will get our dues and rewards; if not here, surely in the hereafter, some nice cool or warm place will be ours to hang on to. Our lives may be happier and we will have lights to burn. E. T. I., Press Secretary.

UNION NO. 60, SAN ANTONIO, TEX.

Old San Tone! What memories the name conjures? At once the home of the Cradle of Liberty, the birthplace of Texan Independence, the Mecca of consumptives, the same likewise of "Liney" boys and roller coasters; the hot tamales town of Texas; the only town that is cosmopolitan, metropolitan, democratic, conservative, all at once, and the last, but not least, the home of the Alamo, that old church ruin wherein were gathered the handful of brave Texans, led by Col. Bowie and Dave Crockett, who baffled the flower of Santa Anna's followers, wrested in defeat, victory and independence for those for whom they gave their lives. No. 60, the banner Union of Texas, lives in San Antonio, and it's a pretty hot Union, too, if any one asks you. At least this impression prevails among its zealous members. Being a mixed Local, we have all branches represented, and our talent is of a rare order. We have electrical discussions that would make Edison grow weary. We never are at a loss for theories, and when it comes down to practice all our boys can handle ohms, volts and amperes to perfection. We have the only electrical ball nine in Texas; all professionals. For dates, etc., reference is given to Bro. Alvin Ellis, down on the Brazos.

The last meeting of No. 60, held Saturday, the 3rd, was a hot one, sure. We initiated two members and had three applications, and two more for next week, so they say, and some good material in sight, so in spite of everything adverse, No. 60 is holding her own.

The weather here is certainly getting like summer, and it is pretty hard on the members, as I believe every one is hard at work. There is lots of work here, but plenty to do it. I understand from reliable sources that there will be plenty of work in the State. Telephone territorial construction; also Postal Telegraph Co. is hard at work. I understand they have their wire out of Dallas and heading south already.

One of our brothers caught a little bird lately. Said bird told him to go and see somebody, and in consequence he is driving the slickest turnout in town and is on the city's pay roll for a good salary each month. Bro. Roy Cushman is the fortunate one, who believes in signs, vouchers and other things. Bro. Potter, the indefatigable "Chawley," alias Texas Bill, is here, sun-tanned and working like a beaver. He says if any of you fellows see his holders, they belong to him. He is working for the Telephone Co., stringing copper metallic circuits.

We understand that Bro. Spangle, our main light in the West End, either will be out of a job soon or else will be general superintendent of motive and all other departments combined. Hope it's the latter, old boy.

No. 60 is getting up a grand picnic. It promises to be a thing of beauty and a joy forever, even if the last fellow has that \$15 in his inside pocket. Don't you know—some of No. 60's friends and ex-members will see this, possibly—well, I'll tell you all about it. Bro. Parsons is just getting over it, and Joe Wellage says "them" and conventions won't give him time to look after his circuits right. I can only say in lieu of photos of the hall, that the other Unions can't touch us on decorating. Our designs were of the Moresque and Archimedean order,

with a slight sprinkling of Parson and Tamaleville touches thrown in for dazzling effect. Our treasury is out of sight. Wellage has it hid in a tomato can under the door jam, to the right of the fire place.

We heard a little tale the other day about one of our ex-brothers, who used to be a staunch Union man, and who could sing his little ode as loud as any of us, that he had joined the army of inconsistencies, and from what your correspondent can see, is evidently in a frame of mind at once inimical to the interests of Unionism, and his oft-avowed declaration of principles. No names are mentioned for reasons, but if this sees the brother in question, he will know "it's him."

I don't want to take more of Bro. Kelly's time and patience, so will close the circuit. To succeed as organized electrical workers, I am convinced that your actions, manner of speech, company you keep and thoroughness in your work, are the essential requisites to our being recognized and respected as an order, and a forever and eternal energy on the part of members to learn more of their business, is also a prime necessity.

NONDESCRIPT.

UNION NO. 66, HOUSTON, TEX.

We hope none of the brothers will think that we are dead because we have not appeared in the "Worker" for a few issues. We haven't had to defend ourselves against outside attacks, and there is very little going on around here that would be of special interest to the brothers.

The Telephone Co. is doing considerable work in and around Houston, and all good men who come this way have no trouble getting work, but there is no demand for "bum" linemen and booze-fighters. This seems pretty tough on linemen who have been in the habit of going on a periodical booze every payday, but it is the best thing that was ever done for the linemen's cause. A large majority of the howls that have gone up from this locality about superintendents and managers have been from men of this class, some of whom are good linemen, but they cannot be depended upon on account of their intemperate habits. We are sorry to say that a few of these men have gotten into the Union, and have, of course, caused trouble and brought the Union into disrepute and kept good men from joining. Such men do the cause a great amount of harm.

There is a vast field of work for Union men to do right along this line. Men who cannot be prevailed upon to break away from debauchery, which makes them unfit for the society of decent people, should be dropped from the Union, for we would be far better off without them. If we, as a Union, ever expect to accomplish much for ourselves, we must raise and keep our moral standard upon a plane that will demand the respect of our employers. Most of the superintendents and managers in this locality did not inherit their positions, but rose from digging holes to the top of the pole, and they know what kind of men to depend upon.

We are pleased to see a disposition on the part of Galveston to "bury the hatchet," and we make this proposition to No. 71's Press Secretary, that if he

will meet us half way (at Alvin), we will fight a duel for a strawberry shortcake.

As we are personally acquainted with "Bill 81," and were much interested in her communication, we would be pleased to hear from her again.

If Mr. M. J. Flynn is so anxious to be set right about the charges made against him, why did he not give his present whereabouts? If he will come out of cover he will get all the justification he wants about the little diamond scrape he got into in Houston.

J. M. STEVENS,
Press Secretary.

UNION NO. 67, QUINCY, ILL.

Well, brothers, I must let you know that No. 67 is still alive, but that is about all I can say for it. At our last meeting there was no quorum, so we could not have a meeting. Some of the boys went to a wedding, some had a date, some wanted to go to the opera, and even our fat Vice President had an excuse.

Our President had just finished wiring the St. Boniface School, about 250 lights, and had to run them for an entertainment. Bro. Jas. Dolan had sickness in his family, so he is excusable. Ed Gilliger had to rock the baby, and some had one thing and some another. They didn't come, at any rate.

Bro. Flaherty has improved enough to leave Hot Springs, which will be welcome news to many. All the boys here are well and nearly all at work. We are glad to see the wife of Bro. Wm. Hickman out after a long illness.

We were glad to see so many Unions represented in last "Worker." It is nice to see so many letters. We also notice that the ladies are taking an interest in our behalf, which we highly appreciate. Come again, sisters; let us hear from you often.

Our new pass-word is a dandy. Stick to it.

C. H. McNEMEE,
Press Secretary.

UNION NO. 70, SCHENECTADY, N. Y.

I suppose the brothers would like to hear from No. 70. We are making very good progress, considering the times. Most of our brothers have done but little work during the past winter. As a majority of our members are employed by the General Electric Co., in a dull time, the Union gets the full benefit of the lay off, which does not have a tendency to make No. 70 very progressive. But at present time we are having a little more work, and are on the point of believing our Republican friend, that confidence has been restored. But I suppose we must be thankful for small favors and larger ones when we get them.

Bro. White has purchased a new wheel, which he has been learning to ride, but he picks anything up very quickly, as he did himself the other evening after trying to ride. We, of course, blamed him for saying that his little brother threw a rope and broke his chain.

Bro. Betting is around again, having recovered from a very serious illness. We are glad to see him once more.

Bro. Grinter, our worthy Vice-President, is having a pleasant time trying to ride his new wheel. He has all he can attend to keeping off the sidewalk, but we trust after a little we will be safe in

trying to pass him, or in allowing our children to play in the front yard or on the sidewalk. But he says he will make it smoke.

Street car work is improving, and according to all reports, a large number of motors will be built during the summer. This will suit Bro. Mackey, who is one of our auburn-haired brothers. We have three members who have hair of the same shade, and you will be right if you think they are the whole of it, and perhaps they are when one of those red hairs gets in the soup.

Bros. Costello and Shannon went out for a stroll the other Saturday evening. They walked up and down our main streets, not forgetting to drop in on an old friend or two, and looking into a few glasses to see that their hair was properly parted in the middle. They made their exit about 3:30, after having been posted by a number of their friends as to the direction that should be taken by them to reach home. We are confident that they reached home safely, as the next day they held a whispered conversation, and I suppose they were taking inventory of the stock taken in.

We are at present working hard in No. 70, keeping the brothers in line, and it is hard work. There is a lack of confidence and brotherly love. There is a strong desire among our members for self, and let every one do the same. We should have more brotherly love, more determination to stand up for each other; help one another in time of need, and do unto others as we would have others do unto us.

WM. A. BIRCH,
Acting Press Secretary.

THE ISLAND CITY.

Very little of importance is going on here at present. Work is pretty dull.

Messrs. Barden & Sheets have the contract for installing the plant in the new Santa Fe Depot. It is to be an iron armored conduit job throughout, with a direct connected 20-kilowatt generator and Ideal engine. The job will be started about April 15th.

Bids are out for the installation of a plant in the new grain elevator, which is being erected by J. C. Stewart & Co., but as it is a scab job, I don't know how it will come out. The B. T. A. have been fighting them from the start, but it does not do much good, as Mr. Stewart has imported scabs from all parts of the country to come here and work ten hours for what pay he chooses to give them. I was talking the other day with a carpenter who came all the way from Florida to work on this job. I asked him what pay he was getting, and he said that he did not know; that he had been working two weeks and had never been paid off or asked what pay he was to receive. Every means possible was brought to bear upon Mr. Stewart to induce him to employ Union labor, but without avail.

We are glad to see that No. 60 is still doing business at the old stand. Come again Bro. (nom de plume) Rose. We would like to hear from you oftener. It is a long time between drinks with No. 60.

No. 71 is doing a good business just now. We had two lights to connect up at our last meeting, and they both burned up to candle power, and that isn't all; we have five more I think to cut in at our next meeting.

Louis Hall, ex-President of No. 60, is in the city. He has charge of the construction work for the Southwestern Telephone Co.

A few months ago the County Court House burned down, and immediately plans and specifications were gotten up for a new one, and the contract has already been let. A committee from the Building Trades Assembly and the Labor Legislative Council did some good work with the County Commissioners, and as a result the specifications read that "none but Union Labor shall be employed and the Union scale of wages shall be paid in all trades employed upon the building." Another stride towards our goal.

W. M. GRAHAM,
Press Secretary.

UNION NO. 73, SPOKANE, WASH.

Owing to lack of work during the winter months, we lost several of our members, and officers as well; our Press Secretary among the latter. That is the reason you have not heard from us during the past two months. At our last meeting the vacancies were filled by electing Bro. E. Hensley as vice president; Bro. H. Palmer, treasurer, and your humble servant, Press Secretary, for the remainder of the term.

At our first meeting in April, after a very short routine of business, we had a smoker. We smoked our pipes, had refreshments, lunch, music and speaking. Our rooms were open to all electrical men. We received two applications and one since, with fair prospects of getting more, as work has commenced. The Edison Company is doing some work, and the Phone Company is doing some new work and some rebuilding. All our members are working, as well as some of the new arrivals.

The following from one of our daily papers explains itself:

Some of the business men and other citizens of Spokane have recently received letters from parties in other States saying that glowing reports are abroad in those sections which give the impression that Spokane is having a building boom, and that there are not enough men here to do the work. Some of those letters have been shown to members of organized labor, who deemed it their duty to bring the matter before their fellow-workers of other localities, and hence passed the following resolutions:

"Whereas, It has come to the notice of the trades council that reports are being circulated broadcast throughout the country of a scarcity of laborers and mechanics of all kinds in this city, and that extraordinary high wages are being offered for their services; and

"Whereas, It is known to the trades council that the real state of affairs is largely exaggerated by these reports, and they are circulated to flood the local labor market, and thereby depress a rate of wages now only sufficient to furnish the indispensable necessities of life; therefore, be it

"Resolved, That the trades council of Spokane deems it its duty to inform the workers elsewhere of the following facts: That while this section of the country enjoys for the present a period of prosperity, and while there is considerable demand for help of various kinds here, yet the local supply is quite adequate to meet all demands that may be made

upon it at present or in the near future; and that the workmen of Spokane, as represented through the trades council, hereby warn their fellow-workers elsewhere against an alluring advertisements in order to spare them inevitable loss and disappointment."

C. B. COWAN, Press Sec'y.

UNION NO. 78, SAGINAW, MICH.

Just as the Press Secretary of No. 78 was enjoying a midnight sleep, a few nights ago, a loud rap at his door awakened him, and when he, in a somewhat startled tone of voice inquired what was wanted, a gruff voice answered that "if the Press Secretary of Union No. 78, National Brotherhood Electrical Workers of America, was sleeping in there, he needed to be awakened." The every-two-monthly wielder of the pen was in a quandary as to the meaning of such an unusual occurrence, and bellowed out, "Who the d—!s out there, and what have you been drinking, five or ten?" "Me name is Dennis Whalen. Oim polace-min on this beat, an bein' as Jack Strachan, your Recording Secretary, jist re-saved a telegram or a letter or something from Jawn Kelley, of St. Louis, Miz-zoura, saying as how ye needed wakin'. OI thought that being that Oim here that the best time to wake ye is whin ye are aslape. Do ye moind now?" The Press Secretary assured Mr. Whalen that he minded, but that he wouldn't mind if Mr. Whalen would go out on his beat and stay there.

Although we are not sure at this writing, it is generally understood that President Hodgins has tendered an unwritten resignation. The Recording Secretary was instructed at the last meeting to write him a letter and find out just where he stands, as although it is greatly to be regretted, if such is the case, we must have a special election and choose another head.

The Union is comfortably ensconced in its new quarters, of which I spoke in my last letter, and we look for a very healthy growth during the summer.

The most humorous incident which I believe has ever taken place at our meetings was when Louis Pflueger, our janitor (for whom there is now very little work, and we are thinking of dropping him from the pay roll), offered to carry up two pails of water—one more than usual—every meeting night if we would only keep him on the roll. Just think, water. And yet he is still on the list.

GEO. S. CRABBE,
Press Secretary.

NOTES FROM MEXICO.

Agua Calientes (Hot Waters), Mexico, April 19, 1897.

Editor "Electrical Worker": Upon leaving the State of California, I promised so many of my friends and brothers to write to them, that I feel I cannot keep my promise without doing a little scheming, so I concluded to write my letter to the "Worker" and let all the boys believe that I have written to them. My letter will not, however, be in the strictest sense an electrical effort, but will be descriptive, which I hope the boys will find entertaining and instructive, as it will be absolutely reliable.

The city of Agua Calientes is situated about 900 miles south of the National

line, upon the Mexican Central Railroad. It derives its name from the numerous hot springs which are found here. It is a city of about 45,000 or 50,000 people. There are located here several very large smelters and reduction works, which prove a vast income to the town in the way of silver, lead, copper, iron and gold. There is an electric light plant here, which sports at the present time two Heisler dynamos, which supply current for two circuits of eighty 15-c. p. incandescent lamps, cut in series. The plant and equipments are under the management of Mr. Wm. Schroeder, formerly of St. Louis; a capable man in every sense of the word. The Heisler system, however, is now considered too ancient and the company has concluded to replace it with more modern machinery. They contemplate the remodeling of the plant by putting in a pair of United generators, and changing the wiring of the city from a series system to a multiple. This work will be commenced at once, as Mr. Chas. Lampert, also of your city, is now here to assist in the reconstruction of the plant. There are no telephones or other electric devices in the city. Neither do I consider the town suitable for the introduction of electrical appliances at this time. The people take a great interest in electrical problems, it is true, but it is more to satisfy their desire to see something new, than to adopt electrical features into general use.

The city of Aguas Calientes is a very old town. The streets are mostly thirty feet in width, and not very straight, and paved with cobble stones all over the city. The sidewalks are five feet wide and are paved with slabs of sandstone. Many of the walks are worn concave by the tread of centuries. The street car service consists of fairly good cars, with two mules hitched up a la tandem for motive power. There are in the city many beautiful and substantial buildings, constructed of carved sandstone. There are also many gardens and public parks, which are quite interesting to an American, inasmuch as they contain different varieties of flowers and trees, and that the style of ornamentation is entirely different from what we find in the States. The square known here as the Central Plaza, situated in the heart of the city, is more generally used for recreative purposes than any other plaza in the city, although there are many of them here. This plaza covers an entire block, and is walled in with great ash trees. Around the roots of each tree there has been built a settee of carved sandstone. These and other seats, hidden among the shrubbery of the Plaza, are nightly occupied by the natives of both sexes, who sing and talk, and otherwise enjoy the incomparable nights they have in this zone. There are also in this Plaza four public water fountains, made active by the constant going and coming of thousands of water girls. From the center of the Plaza rises an ancient monument, erected in 1535. It is 80 feet in height. The top of this monument was knocked off by Gen. Taylor during his bombardment of the city in 1845, but it has been repaired. Immediately across the street from the Plaza stands one of the great cathedrals of the city, whose great dome, 170 feet in height, contains seven bells of different sizes. One of the largest of these was pierced by an American solid shot at

the same time that the monument went down, and it has not been rung since.

The city just now is greatly excited over what is known as the feast of San Marcus, which begins on the 20th day of this month and lasts for two weeks. There are many things in connection with this feast that are not generally known, and which I presume would be of great interest to the boys. The feast of San Marcus is an event celebrating Easter, and for the past week preliminary services have been going on; on the 15th, special prayer services were held by the people, in which so many engaged that all the churches, their yards, and surrounding streets were filled with praying people. This continued all day and the next day (Good-Friday). On the 15th, boys begin to appear on the streets carrying stuffed Judases of all sizes, from four inches to seven feet in height, which they were offering for sale. During the evening of the 15th and for three nights following, boys have been in the towers of the churches beating the walls and bells with sticks, it being their desire to drive out the devils that are hanging around the town. On Good Friday the usual services of the Catholic Church were conducted in all the churches. On the morning of Saturday, the 17th, a great change was noticed throughout the city. Many ropes had been drawn across the streets during the night, from which were dangling the Judases that had been offered for sale during the past few days. Upon inquiry, I learned that these, the images of the betrayer of our Christ, were to be destroyed at 9 o'clock in the morning. Of course I had to witness this, so I wandered down to the principal church, before which hung three enormous Judases, while upon the streets were gathered thousands of people, including all conditions of life, shaking their fists and swearing at the hanging images. A 9 o'clock there was a great commotion. A peon came down the street, with a burning taper on the end of a bamboo pole, and set fire to the tails of the images. Now this fire divulged a secret to me. Each tail contained a firecracker in proportion to the size of the tail, and when this exploded the people rushed upon the images, pulled them down with hooks and dragged them about the streets, spat upon them, and abused them in every conceivable manner, after which they attended church again and were ready for the services that followed on Easter Sunday. Now the feast of San Marcus that will follow, is to celebrate the events in religious history, attending the betrayal, crucifixion and ascension of Christ. This feast will be conducted in the Garden of San Marcus, the largest and most beautiful garden in the city. This garden has been decorated in a peculiar way, and while I cannot enter into a description of it, I have profited very much in lines of decorative art. The general details of the feast that are to follow, I will leave for a later contribution, but I will pause for a moment at this time to touch upon the habits and disposition of the people.

Remember that the people here are not the true Spaniards and Indians (the true Castilian lives farther south), and possesses every shade of complexion and morals. They are a people without price or ambition. They are poor in the midst of wealth; a few are well dressed, a few are entirely naked, and the vast majority are in rags. It is seldom that



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a person meets a native upon the street whose clothing has not been patched over and over again, and yet it is so dilapidated that it will not cover his person. They are a nation of beggars, whose children, from the smallest up, are trained to beg from Americans in the most approved manner. Nearly the whole race here are thieves and we have been compelled to keep a constant watch upon our property (an animatoscope) to prevent them from stealing the whole or some part of it. It is strange that people who can betray so keen a religion can fall so low in morals and in principle. There is certainly something wrong with their teachers.

Now, Bro. Kelly, I do not suppose that you are prepared to print the whole Mexican history in the "Worker" of this issue, so I will close. I will ask your journal to remember me to all the brothers, especially to those of the Pacific Coast. If any of them can write to me at Silas, Mexico, friends will re-address to me. Also tell the boys that I am well and making money. Fraternally yours,

F. E. PETERS,
Member of No. 61.

A BIG ELECTRIC RAILWAY CONTRACT LET.

The Century Engineering Co., of Cleveland, O., has contracted for 100 miles of electric railroad to commence at Benton Harbor, Mich., and extend to Sister Lakes, branches North of Allegan and South of Casopolis. There are to be four power houses on the line, each station to feed 15 miles each way. Each station to be equipped with two direct connected 400 K. W., except at Benton Harbor, that station having three direct connected 400 K. W. It was decided to use the marine type of engine and Scotch boilers. The Globe Iron Works of Cleveland secured the contract to build this machinery and boilers. The engines are of the inverted, direct connected type of marine machine, of 20" and 40" diameter of cylinder, by 30" stroke, direct connected to the Walker generators at 120 revolutions per minute. The engines are to generate 700 indicated H. P., at 1-3 cut-off. The boilers are of single ended type, about 12 feet by 12, to carry 125 pounds pressure.—Scientific Machinist.

DEFINITIONS.

Trade Union.—An organized association of workmen skilled in any trade or industrial occupation formed for the protection and promotion of their common interests, especially to procure remunerative wages for their labor.

Socialism.—A theory of civil polity that aims to secure the reconstruction of society, increase of wealth, and a more equal distribution of the products of labor through the public collective ownership of land and capital (as distinguished from property), and the public collective management of all industries.

Directory of Local Unions.

(Secretaries will please furnish the necessary information to make this directory complete. Note that the time and place of meeting, the name of the President, the names and addresses of the Recording and Financial Secretaries are required.)

No. 1, St. Louis, Mo.—Meets every Tuesday at s. e. cor. 21st and Franklin avenue. M. L. Durkin, Pres., 2223 Wash st.; L. H. Daggett, R. S., 1220 St. Ange av.; J. P. Casey, F. S., 2702 Spring av.

No. 2, Milwaukee, Wis.—Meets every Friday at 318 State st. W. A. Gerardin, Pres., 457 Broadway; Chas. Herman, R. S., 1805 Walnut st.; Joe Harris, F. S., 448 Russell ave.

No. 3, Denver, Col.—E. L. Layne, Pres., 1011 19th st.; Geo. P. Manning, Sec., 1633 Lawrence st.

No. 4, New Orleans, La.—Meets 1st and 3d Tuesdays at Carondelet and Perdido sts. J. McGregory, Pres., 2111 Rousseau st.; C. M. Hale, R. S., 630 St. Mary st.; R. B. Joyce, F. S., 331 S. Bassin st.

No. 5, Pittsburg, Pa.—A. E. Eldridge, Pres. 156 Devilliers st.; H. McGregor, R. S., Nesbit & Allequippa sts.; C. J. Jeffery, F. S., 623 Lowell st.

No. 6, San Francisco, Cal.—Meets 2nd and 4th Wednesdays at Forester's Hall, 20 Eddy st. A. C. Johnson, Pres., 226 Turk st.; J. J. Cameron, R. S., 1510 Mission st.; R. P. Gale, F. S., 1004 Larkin st.

No. 7, Springfield, Mass.—Meets every Wednesday at room 14, Barnes Bldg. Wm. Gregg, Pres., 107 Bancroft st.; T. H. Bowen, R. S., 26 Hubbard av.; Jos. McGilvray, F. S., 34 Gray av.

No. 8, Toledo, O.—Meets every Tuesday at Friendship Hall, cor. Jefferson and Summit sts. F. Crowley, Pres., 648 W. Lafayette st.; E. McGinn, R. S., 235 Western ave.; W. H. Welsh, F. S., 1907 Cherry st.

No. 9, Chicago, Ill.—Meets every Saturday at 106 E. Randolph st. A. F. Snider, Pres., 343 State st.; L. Christenson, R. S., 1043 S. Irving ave.; C. W. Beach, F. S., 5931 Sangamon st.

No. 10, Indianapolis, Ind.—Meets 1st and 3rd Monday at 29½ W. Pearl st. John Berry, Pres., care of headquarters Fire Dept.; E. Buscile, R. S., 487 N. Illinois st.; E. C. Hartung, F. S., Rooms 5-7 Cyclorama Bldg.

No. 11, Terre Haute, Ind.—Meets 2d and 4th Tuesdays at 8th and Main sts. C. D. Updegraff, Pres., 529 S. Ninth st.; M. Davis, R. S., 918 N. 9th st.; W. H. Schaffer, F. S., 114 N. 14th st.

No. 12, Evansville, Ind.—Meets every Tuesday at cor. 3rd and Sycamore st. Harry Fisher, Pres., 200 Clark st.; A. L. Swanson, R. S., 1054 Water st.; A. N. Grant, F. S., 202 Clark st.

No. 14, Memphis, Tenn.—Chas. E. Blake, Pres., 70 Mulberry st.; J. A. Myles, Sec., 207 De Soto st.

No. 15, Philadelphia, Pa.—Meets every Tuesday at 711 Spring Garden st. E. G. Boyle, Pres., Penn. Farmers' Hotel, 3d and Callowhill sts.; E. Hennessy, R. S., 1518 French st.; Chas. T. Lang, F. S., 829 Race st.

No. 16, Lynn, Mass.—Meet at General Electric Band Room, 9½ South st. Jas. Robson, Pres., 46 W. Neptune st.; C. W. Perkins, R. S., 6 Allen's Court; E. J. Malloy, F. S., 86 Cottage st.

No. 17, Detroit, Mich.—Meets 1st and 3d Thursdays at Room 8 Hilsendegen Block. W. J. Donovan, Pres., 112 Chestnut st.; Geo. H. Brown, R. S., 50 Lewis st.; P. F. Andrich, F. S., 369 Chene st.

No. 18, Kansas City, Mo.—Meets 2d and 4th Fridays at 1117 Walnut st. J. J. Lynch, Pres., 717 Delaware st.; C. F. Drollinger, R. S., 326 Garfield av.; Kansas City, Kas.; J. H. Lynn, F. S., 2215 Woodland ave.

No. 19, Chicago, Ill.—Meets 1st and 3d Tuesdays at 6512 Cottage Grove av. M. J. Sullivan, Pres., 4951 Princeton av.; G. W. Richard, R. S., 5610 S. Halsted st.; D. Pearce, F. S., 3540 Wentworth av.

No. 21, Wheeling, W. Va.—Meets 1st and 3d Tuesdays at Trades Assembly Hall. H. F. Wyse, Pres., Box 111; C. L. Ulery, R. S., Box 111; W. J. Clark, F. S., McClure House.

No. 22, Omaha, Neb.—Meets every 1st and 3d Wednesdays at Labor Temple, 17th & Douglas st. J. W. Watters, Pres., 2211 Pierce st.; M. J. Curran, R. S., 1814 St. Mary's av.; W. J. Wales, F. S., 1804 Farnum st.

No. 23, St. Paul, Minn.—Meets 2d and 4th Fridays at Labor Hall, 3rd and Wabasha sts. Jno. O'Donnell, Pres., 4th and Wabasha sts.; Thos. O'Toole, R. S., 333 E. 6th st.; F. Volk, F. S., 175 W. 6th st.

No. 24, Minneapolis, Minn.—Meets 1st and 3d Wednesdays at 34 and 36 6th st. S. Geo. Heilig, Pres., 18 9th st.; L. R. Stevens, R. S., 18 Western av.; A. Aune, F. S., 3129 Longfellow av.

No. 25, Duluth, Minn.—Meets 2d and 4th Thursdays at room 6 Banning Bldg. R. Thayer, Pres., 24 Third ave. W.; L. P. Runkle, R. S., 17 Norris Bldg.; Jas. F. Owens, F. S., 414 E. 1st st.

No. 26, Washington, D. C.—Meets every Monday at 628 Louisiana av. Jos. Patterson, Pres., 1127 12th st. N. E.; H. E. Kaighn, R. S., 1425 Euclid Pl.; R. F. Metzler, F. S., 509 11th st. N. W.

No. 27, Baltimore, Md.—Meets every Monday at Hall, cor. Fayette and Park avs. C. F. Leitz, Pres., 506 S. Pulaski st.; J. P. Jones, R. S., 1414 Mosher st.; F. H. Russell, F. S., 1408 Asquith st.

No. 28, Louisville, Ky.—Meets 1st and 3d Tuesdays at Beck Hall, 1st st. near Jefferson Calvin Beach, Pres., 1020 W. Market st.; Ed. Herpt, R. S., 607 Magnolia st.; Jno. C. Deibel, F. S., 418 15th st.

No. 29, Atlanta, Ga.—Meets every Sunday at 61½ Alabama st. Geo. Foster, Pres., 100 Walker st.; D. J. Kerr, R. S., 114 Richardson st.; Geo. Raymer, F. S., 121 Rhodes st.

No. 30, Cincinnati, O.—Meets 1st and 3d Mondays at 136 E. Court st. W. Williams, Pres., 26 Mitchell ave., Mt. Auburn; H. C. Georich, R. S., 225 W. Court st.; J. F. Harmuth, F. S., 2158 Vernon st., Clifton Heights.

No. 31, Jersey City, N. J.—Meets 2d and 4th Thursdays at 116 Newark av. Thos. Watson, Pres., 513 Jersey av.; F. J. Anderson, R. S., 228 Washington st.; T. L. Jones, F. S., 157 Grand st.

No. 32, Paterson, N. J.—Meets 1st and 3d Mondays at German Union Hall. J. F. Colvin, Pres., 963 Madison av.; Jos. Mahler, R. S., 348 Grand st.; Paterson Heights, Paterson, N. J.; John Kane, F. S., 274 Hamilton av.

No. 35, Boston, Mass.—Meets every Wednesday at Well's Memorial Hall, 987 Washington st. J. Larkin, Pres., 13 Cambridge st.; D. McGilvray, R. S., 7 Humboldt Park; Roxbury; K. H. Bradford, F. S., 268 River st., Cambridge.

No. 36, Sacramento, Cal.—J. A. Crombach, Pres., 1613 4th st.; E. G. Fletcher, R. S., 505 J st.; G. E. Flanagan, F. S., 1315 K st.

No. 37, Hartford, Conn.—Meets 1st and 3d Fridays at Central Union Labor Hall, 11 Central Row. M. F. Owens, Pres., 63 Hawthorne st.; D. P. Cronin, R. S., 49 Windsor st.; C. E. Byrne, F. S., 16 John st.

No. 38, Cleveland, O.—Meets every Thursday at 393 Ontario st. R. M. Ross, Pres., 33½ Colgate st.; H. C. Ott, R. S., 68 Clara st.; J. E. Suloff, F. S., 28 Norton st.

No. 39, Providence, R. I.—Meets 1st and 3d Mondays at Phoenix Bldg, 157 Westminster st. H. B. Kelly, Pres., 1950 Westminster st.; M. L. Carder, R. S., 40 Wilson st.; G. D. Higgins, F. S., 8 Carpenter st.

No. 40, St. Joseph, Mo.—Meets every Monday at north-west corner 8th and Locust sts. "Brockaw's Hall." R. M. Martin, Pres., 1702 N. 3d st.; Wm. Dorsel, R. S., 1710 Calhoun st.; F. A. Dunn, F. S., 426 Edmond st.

No. 41, Philadelphia, Pa.—Geo. A. Neal, Pres., 3626 Wharton st.

No. 43, Syracuse, N. Y.—Meets 1st and 3rd Thursdays at Greenwald's Hall, cor. Mulberry and Water st.; F. A. Chadwick, Pres., 108 Roberts ave.; G. A. Davenport, R. S., 646 Gifford st.; Chas. A. Miller, F. S., 906 Montgomery st.

No. 44, Rochester, N. Y.—F. M. Kehoe, Pres., 21 Costar st.; Wm. A. Dreese, R. S., 56 4th st.; Fred Fish, F. S., 123 State st.

No. 45, Buffalo, N. Y.—Meets 1st and 3rd Saturdays at Council Hall. Wm. Hailey, Pres., 125 Erie st.; Chas. Guyton, R. S., 124 Swan av.; C. E. Stinson, F. S., 298 Carolina st.

No. 46, Lowell, Mass.—M. J. Burns, Pres., Police Dept.; Thos. Dalton, R. S., 368 Concord st.; H. E. Maguire, F. S., 95 Christian st.

No. 47, Worcester, Mass.—C. C. Coghill, Pres., 113 West st.; G. R. Lincoln, R. S., Millbury; Thos. Reed, F. S., 61 Myrtle st.

No. 48, Ft. Wayne, Ind.—Meets 1st and 3rd Fridays at cor. Main and Clinton sts. R. Bartel, Pres., Hotel Tremont; A. J. Lathouse, R. S., 148 Wells st.; G. B. Taylor, F. S., 31 Douglas av.

No. 49, Bloomington, Ill.—Meets 2d Monday at Trades Assembly Hall. C. F. Snyder, Pres., Box 328; Guy Carlton, R. S., East and Market sts.; W. C. Gorey, F. S., 409 S. Madison st.

No. 51, Scranton, Pa.—Jas. Harding, Pres., 601 Meridian st.; P. Campbell, R. S., 1210 Irving av.; Ruben Robins, F. S., 1223 Hampton st.

No. 52, Davenport, Ia.—Meets 1st and 3d Tuesday; A. L. Wheeler, Pres., Atlantic Hotel; J. H. Clark, Sec., 215 Iowa st.

No. 53, Harrisburg, Pa.—C. A. Swager, Pres., 115½ Market st.; Jas. Emminger, R. S., 25 N. 15th st.; C. Anderson, F. S., 46 Summit st.

No. 54, Peoria, Ill.—Meets 1st and 3rd Wednesdays at 301 Main st. H. Scheerer, Pres., 219 W. Jefferson st.; Harry Dunn, R. S., East Peoria; L. C. Crawley, F. S., 115 Washington st.

No. 55 Des Moines, Ia.—L. M. Steadman, Pres., E. T. Purcell, R. S., Gratis st. S. S.; Wm. Leedon, F. S.

No. 56, Erie, Pa.—Ed. Gilmore, Pres., 218 State street; E. T. Undermill, R. S., care Black Mig. Co.; J. P. Hanlon, F. S., 23 N. Park Row.

No. 57, Salt Lake City, Utah.—R. Blair, Sec'y, care of Citizens E. L. Co.

No. 60, San Antonio, Tex.—Meets 1st and 3d Saturdays, Meyers' Hall, Alamo Plaza. Martin Wright, Pres., 114 Romania st.; J. P. Gittinger, R. S., 326 Fest st.; W. F. Hendricks, F. S., 722 Mosquite st.

No. 61, Los Angeles, Cal.—C. P. Lofthouse, Pres., 746 San Julian st.; F. W. Messacar, R. S., Station A; W. R. Kingston, F. S., 119 Kern st.

No. 62, Kalamazoo, Mich.—A. D. Ayres, Pres., 534 S. Burdick st.; L. Bellman, R. S., 540 Pine st.; G. E. Tift, F. S., 324 Sarah st.

No. 63, Tampa, Fla.—Theo. Glinn, Pres., Pt. Tampa City; W. P. Crofts, R. S., lock box 264; Arthur D. Henry, F. S., box 220.

No. 65, Butte, Mont.—Meets 1st and 3d Sundays in Good Templars Hall, W. Broadway. J. R. Dutton, Pres., 601 Placer st.; D. J. Winslow, R. S., 103 E. Granito st.; A. G. Ellerick, F. S., Gen'l Del.

No. 66, Houston, Tex.—Meets 1st & 3d Mondays. G. O. Wood, Pres., 1214 Providence st.; A. H. Stelle, R. S., 12 Main st.; W. V. Fisk, F. S., care Telephone office.

No. 67, Quincy, Ill.—Meets 2nd and 4th Wednesdays at Trades Assembly Hall, So. 5th st. Wm. Wagner, Pres., 517 Sycamore st.; E. W. Nessler, R. S., 602 Sixth ave S.; D. M. Mallinson, F. S., 1120 Vine st.

No. 68, Little Rock, Ark.—G. W. Wilson, Pres., care Brown Machine Co.; C. J. Griffith, R. S., care L. R. Tract & El. Co.; C. M. Milham, F. S., 309 W. Markham st.

No. 69, Dallas, Tex.—Meets 1st and 3rd Saturday at Labor Hall. S. D. Claiborne, Pres., 141 San Jacinto st.; W. H. Young, R. S., 190 Beaumont st.; F. G. Montgomery, F. S., 190 Collins st.

No. 70, Schenectady, N. Y.—Meets 2d and 4th Tuesdays at Trades Assembly Hall, cor. Centre and State sts. F. Litzendorf, Pres., Crane st., Mt. Pleasant; W. A. Birch, R. S., 608 Liberty st.; J. D. Betting, F. S., 626 Villa road.

No. 71, Galveston, Tex.—Meets 2d and 4th Wednesdays. J. T. Payne, Pres., 1314 Centre st.; F. J. Schaller, R. S., 2514 Church st.; G. L. Garrett, F. S., 2108 Av. L.

No. 72, Waco, Tex.—Meets 2d and 4th Wednesdays at Labor Hall. M. F. Wortham, Pres., 912 S. 6th st.; Jos. Hodges, Sec'y, 728 S. 6th st.

No. 73, Spokane, Wash.—Meets 1st and 3rd Thursdays at Oliver Hall, 336½ Riverside av. Gus Benson, Pres., 504 Nichols Block; T. H. Denter, R. S., box 635; C. C. Van Inwegen, F. S., 107 Howard st. S.

No. 74, Fall River, Mass.—Meets every Monday at cor. Main and Bedford sts. W. I. White, Pres., 59 Bowen st.; Jas. Murphy, R. S., 100 4th st.; Thos. Bailey, F. S., 135 Snell st.

No. 76, Grand Rapids, Mich.—Meets 1st and 3d Fridays. D. B. McIntyre, Pres., Ohio House; Owen Freeman, R. S.; G. H. Higgins, F. S., 63 Pleasant st.

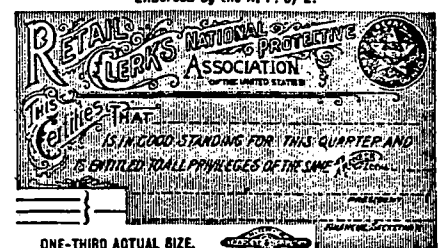
No. 78, Saginaw, Mich.—Jas. Hodgins, Pres., 308 N. Franklin st.; John Strachan, R. S., 336 N. 2nd st.; Chas. Ross, F. S., P. O. box 225, E. S.

No. 79, Austin, Tex.—Meets every Thursday night at Maccabee Hall. J. L. Vorkauer, Pres., 1206 San Jacinto st.; Chas. J. Jackson, R. S., Mayor's office; B. Y. Lovejoy, F. S., 109-111 E. 7th st.

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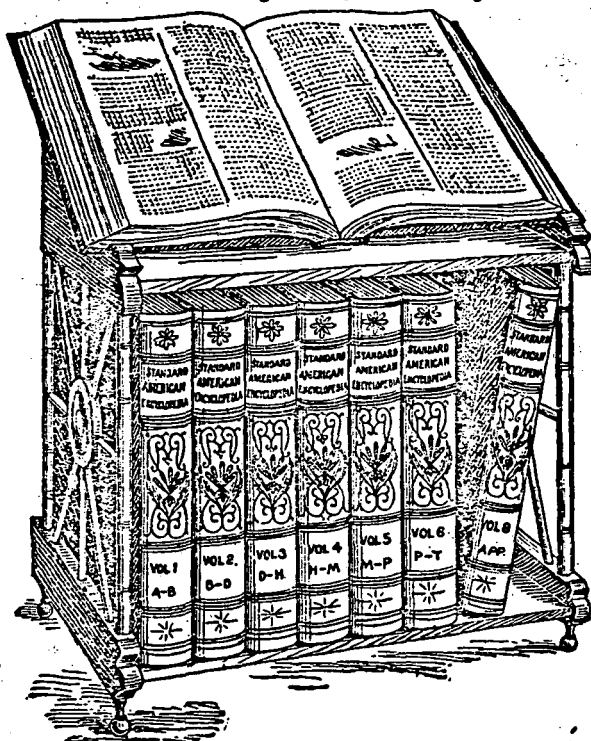
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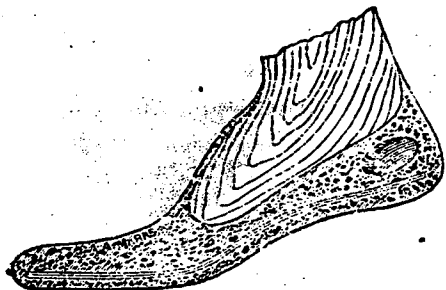
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